

ABSTRACT

Title of Dissertation: EXAMINING PERSISTENCE FACTORS FOR MINORITY AND
WHITE FEMALE STUDENTS AT RURAL COMMUNITY
COLLEGES IN OHIO

Charisse T. Penn, Doctor of Education, May 2019

Dissertation chaired by: Rosemary Gillett-Karam, PhD, Department of Advanced Studies,
Leadership & Policy

The purpose of this quantitative study was to examine persistence factors of Minority and White female students at *three rural community colleges in Ohio*. *The study also examined the demographic characteristics of female Ohio rural community college students*. The independent variables in this study were race (White, Minority), gender, first-year-to-college status (first year, non-first year), and enrollment status (enrolled, non-enrolled). The dependent variables in this study were the ten College Persistence Questionnaire factors: academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, scholastic conscientiousness, institutional commitment, academic motivation, and academic efficacy. Descriptive statistics examined the demographic characteristics of female community college students. Inferential statistics (MANOVA, Multivariate regression, Chi-Square) were employed to examine the relationships between the independent and dependent variables. The overall findings indicate Minority female students' Degree Commitment, Scholastic Conscientiousness and Institutional Commitment were lower than that of White female students. In addition, the results of enrolled versus non-enrolled suggested female students who were enrolled had lower Degree Commitment, Academic Motivation and Academic Efficacy than that of female students who were not enrolled. Last, the results indicate that there is no significant main effect of first year to college (first-year versus non-first year) on any of the ten College Persistence Factors and that a statistically significant relationship was found between the father's education and race.

EXAMINING PERSISTENCE FACTORS FOR MINORITY AND WHITE FEMALE STUDENTS AT
RURAL COMMUNITY COLLEGES IN OHIO

by

Charisse T. Penn

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

MORGAN STATE UNIVERSITY

May 2019

EXAMINING PERSISTENCE FACTORS FOR MINORITY AND WHITE FEMALE STUDENTS AT
RURAL COMMUNITY COLLEGES IN OHIO

by

Charisse T. Penn

has been approved

January 22, 2019

DISSERTATION COMMITTEE APPROVAL:

_____, Chair
Rosemary Gillett-Karam, PhD

Michael Parsons, EdD

Uttam Gaulee, PhD

Acknowledgements

To Sterling and Verna Williams, Charae and Jason Keys, Mathis Family, Gilbert Turnage, Julia Gill, Charlene Newlin-Arrington, Yvonne and Iran Watson, Morgan State University and CCLDP online cohort 24 and a host of family and friends. To the invisible two-year rural public institutions and communities everywhere, we see you and you are not forgotten. To Dr. Rosemary Gillett-Karam, Dr. Michael Parsons, Dr. Roy Viar, IV, Dr. Uttam Gaulee, Dr. Tiffany Thompson-Johnson and Dr. Tiffany Boykin. Thank you for your guidance and patience. To the leadership at the research study institutions, I could not have conducted this research without you. I appreciate your generosity and hospitality. To all girls and women everywhere: stay vigilant and resolute.

Table of Contents

	Page
Acknowledgements	iii
List of Tables	vi
Chapter 1: Introduction	1
Theoretical Framework	3
Purpose of the Study	5
Research Questions	7
Significance of the Study	7
Assumptions, Delimitations, and Limitations of the Study	8
Summary	9
Chapter 2: Review of Literature	10
Rural Communities and Community Colleges	10
Higher Education and Ohio Workforce	12
Institution Comparison, Population, and Demographics	13
Women and Race Differentiation	15
Student Persistence	17
Barriers to Persistence	18
Promoting Persistence	19
Student Engagement	20
First-year Experience	22
Institutional Commitment	23
College Persistence Questionnaire Components	24
Quality Assessment	24
Research Perspective	25
Research Comparison and Influence	26
Theoretical Framework	27
Reflection on the Literature and Issues	27

Summary	30
Chapter 3: Methodology	31
Research Design and Approach	31
Research Questions and Hypotheses	31
Research Setting	33
Population and Sample	33
Instrumentation	34
CPQ Demonstrated Use Community College/Reliability and Validity	35
Procedure	39
Data analysis and Level of Significance	40
Variables in Study	41
Protection of Study Participants	42
Summary	42
Chapter 4: Data Analysis	43
Descriptive Statistics	43
Inferential Statistics	45
Summary	53
Chapter 5: Discussion, Conclusion, Implications, and Recommendations	55
Theoretical Discussion	56
Discussion of Findings	58
Alignment of Findings to Theoretical Framework (2009)	62
Limitations	64
Recommendations for Best Practices	65
Recommendations for Future Research	65
Conclusion	66
Appendix: College Persistence Questionnaire Student Information Form, Version 2.0	77

List of Tables

	Page
Table 1. IPEDS Individual Institution Comparison	14
Table 2. CCSSE Benchmark Scores Report: Main Surveys 2013-2014.....	21
Table 3. Reliability of Participants' Survey Subscales and Items	39
Table 4. Summary of Data Analysis Procedures.....	41
Table 5. Demographic Characteristics of Participants.....	44
Table 6. Multivariate Effects of Race (White, Minority) on the Ten CPQ Factors	47
Table 7. Significant Univariate Effects of Race (White, Minority) on the Ten CPQ Factors	47
Table 8. Multivariate Effects of Enrollment on the Ten CPQ Factors	48
Table 9. Significant Univariate Effects of Enrollment on the Ten CPQ Factors	49
Table 10. Significant Multivariate Regression Results of Race and the Ten CPQ Factors.....	50
Table 11. Significant Multivariate Regression Results of First Year to College and the Ten CPQ Factors.....	51
Table 12. Significant Multivariate Regression Results of Enrollment and the Ten CPQ Factors .	51
Table 13. Chi Square Results for the Relationship in Parental Education of White and Minority Female Students.....	52

Chapter 1: Introduction

According to the Rural Community College Alliance ([RCCA], 2013), America's rural community colleges make up 64% of all community colleges, serving millions of students nationwide. The American Association of Community Colleges ([AACCC], 2013) reported that suburban and urban community colleges throughout the United States in 2013 made up 35% of all community colleges. The College Board (2016) explained that urban community colleges tend to serve traditional-age students who experience employment, income, and language barriers.

Unlike urban and suburban community colleges, rural community colleges have described themselves as *inclusive neighborhood schools* that create opportunities through transfer programs, occupational programs, and cultural experiences (RCCA, 2013). The Integrated Postsecondary Education Data System, or IPEDS (2007), referred to "rural" as a region independent of an urban locale. As a result, public higher education policies and practices have wide-ranging assumptions centered on terms defined by the government. The implications affect the creation of educational resources and objectives in rural communities (Arnold, Biscoe, Farmer, Robertson, & Shapley, 2007). According to Hillman (2016), location is important to college opportunity and attainment, with "education deserts" demonstrating the stratification of opportunity for social mobility, particularly by race, income, and class. Geographical obstacles continue to be a barrier pertaining to degree attainment among rural and urban college students (USDA, 2017). The Rural School and Community Trust refers to this phenomenon as the "invisibility of rural education" (Johnson, Showalter, Klein, & Lester, 2014, p. 29). This invisibility persists despite the fact that nationally there are 594 publicly controlled rural community college districts representing more than 64% of all districts and serving 3.4 million students (Rural Community College Alliance, 2016).

The United States Department of Agriculture ([USDA], 2017) has concluded that "rural citizens are making educational gains (p.1). But, in rural America, educational attainment goals vary among demographics including gender, race, and ethnicity. In general, compared to urban

communities, rural communities are trailing in the share of adults who obtain a college degree (USDA, 2017). Furthermore, rural community colleges experience challenges with financial restraints, infrastructure, low population density, demographics, and geographic areas due to a lack of resources (RCCA, 2013). Oftentimes, rural populations divide races into White zones separated from Black zones in rural areas (Valadez, 1999). Their living conditions are riddled with issues, including low populations, poverty, educational attainment, underemployment, lack of technology resources, and illiteracy.

According to Diel-Amen and Turley, (2007); Goldrick-Rab, Carter, and Wagner (2007), “College attendance and completion, vary significantly across gender, socioeconomic, ethnic and racial groups in the United States” (Byun, Meece & Irvin, 2012, p.413). In addition, the Alliance for Excellent Education (2010) explained, “Past studies have not examined educational difference as it relates to rural regions. However, since 20% of the United States youth reside in rural communities, their postsecondary participation and degree completion warrant examination” (p. 413).

While there has been much research on community college persistence (Leppel, 2002; Pascarella & Terenzini, 2005; Peltier, Laden, & Matranga, 1999; Reason, 2009; Robbins et al., 2004; Terenzini & Reason, 2005), relatively little is known about the role of pre-collegiate experiences, including students’ parental education, first-year status, and enrollment status, as well as best predictors for persistence, of rural community college students. The focus of the present study is to examine pre-college background characteristics and persistence predictors, as identified in the College Persistence Questionnaire ([CPQ] Davidson, Beck, and Grisaffe, 2015), of White and racial/ethnic minority female students attending three rural community colleges in Ohio. Given that rural college students lag in obtaining a college degree in comparison to urban college students, and students who identify as racial/ethnic minorities lag even further behind their White counterparts in obtaining a college degree, this study is warranted. In 2000, rural female college students increased degree completion by graduating with an associate’s degree by six percent. Female students enrolled in urban communities between 2000 and 2015 outpaced their male peers in earning an associate or bachelor’s degree. However, rural college students,

male or female, have not been able to replicate the same results as urban areas in earning a post-secondary degree (USDA, 2017 Edition). Accordingly, this investigation emphasizes the experiences of female students. In addition to examining the CPQ persistence factors for racial/ethnic minority and White female students, this study also examined the role of other pre-college characteristics, including parental education, first year to college status, and enrollment status [enrolled, non-enrolled]) on persistence.

Theoretical Framework

In 2005, Terenzini and Reason (2005) proposed a theoretical framework that considers the multiple and interrelated student, faculty, and institutional forces that influence college success. This framework, which examines a comprehensive model of influences on student learning and persistence, is the lens undergirding this research study and highlights the significance of examining influences on student persistence. Terenzini and Reason (2009) explained that there is an “array of influences that impact student outcomes” (p. 662).

According to Reason (2009),

Students enter postsecondary institutions with an array of precollege background characteristics; academic preparation and experiences; and social and personal dispositions and experiences. Students vary in their sociodemographic traits (e.g., gender, race/ethnicity, age, family income, and parental education)”, their academic preparation and performance (e.g., school setting, academic achievement, school curriculum), and their personal and social experiences (e.g., personal goals, academic goals, achievement motivation). (p. 662)

Additionally, the organizational context of the institution influences a student’s desire to persist to degree completion (Reason, 2009, p. 662). For example, the literature has concluded that students who begin their academic journey at a two-year institution or four-year institution, or attend special mission institutions such as Historically Black Colleges and Universities, or even an all-female institution, experience positive persistence. This is likely due to the environmental and student climate characteristics that positively influence achievement. Although institutional size, location, and sources of support are influencers, so are organizational practices, policies,

and behaviors and attitudes of the institution that impact a student's experience (Reason, 2009, p. 667).

The peer environment within the college setting cultivates the normative and dominates values, beliefs, and attitudes of the study body. Racial climate and gender are two characteristics that influence the peer environment. As Pascarella and Terenzini (2005) pointed out, "the effects of campus racial climate on student persistence is likely indirect and subtle" (Reason, 2009, p. 670). Moreover, since degree attainment in rural communities continues to lag behind urban areas and is unequally obtained among demographic groups, there is significant relevance to the current study in that gender and race identities contribute to the female rural community college student's experience.

Terenzini and Reason (2005) suggest "the final and most immediate set of influences in shaping student persistence includes students' own experiences in various areas of their academic and nonacademic lives" (Reason, 2009, p. 672). A student's curricular, classroom and co-curricular experiences influence persistence. The classroom experiences of students are linked to student persistence and increase a student's integration and institutional commitment (Reason, 2009). The researchers examined the unusual link between persistence and the proposed framework, and hypothesized that "student persistence research is a multi-institutional assignment" and that "enhancing student persistence is local" (Terenzini & Reason, 2005, p. 678). The objective of student persistence research is thought to understand "multiple concentric environments they inhabit, recognizing that different students engage differently within those environments" (Reason, 2009, p. 662).

This investigation employs the College Persistence Questionnaire [CPQ] (Davidson et al., 2009). The CPQ version one predicated attrition; however, factors in relationship with retention were not part of the original instrument. Therefore, the exploratory factor analyses resulted in the use of six factors from version one. Additional research took place to target in on the six factors, and four new factors were introduced for a total of 10 factors that indicate a students' interaction with the collegiate environment. These 10 factors make up the Student Experience section of version two.

The CPQ is a well-known tool used to evaluate a student's likelihood to persist in college. According to Davidson et al. 2009, the CPQ examines the students' reaction to their collegiate academic and social environments. The tool is comprised of 60 questions employing a 5-point Likert scale to measure 10 persistence factors including (a) academic integration, (b) social integration, (3) degree commitment, (d) collegiate stress, (e) advising, (f) financial strain, (g) institutional commitment, (h) academic motivation, (i) scholastic conscientiousness, and (j) academic efficacy. These 10 factors then are related to four benchmarks 1) student pre-college characteristics; 2) student experiences; 3) organizational context; and 4) peer environment. The CPQ factor scores predict a student's decision to enroll, persist to enroll and attrition. These indices correspond to factors which research literature has identified as influencing a student's decision to enroll from first-year to second-year or withdraw. The outcomes have been touted as aiding both educators and legislators in creating retention intervention models (Davidson et al., 2009).

Students who attend rural community colleges engage differently based on their environment and experiences, and since rural students lag in degree obtainment in comparison, it's recommended that community college leaders examine best predictors of persistence for rural community college students. Likewise, a synthesis of the persistence model, established by Terenzini and Reason (2005), and concepts of the CPQ (Davidson, Beck, & Grisaffe, 2015) are most appropriate to guide the current investigation. Together, the aforementioned persistence model and CPQ allowed the researcher to gain a better understanding of best predictors for persistence for White and minority female students attending rural community colleges in Ohio.

Purpose of the Study

The purpose of this quantitative study was to examine the role of race, gender, and pre-college experiences and other student characteristics on persistence of Minority and White female students at three Ohio rural community colleges. Examining the CPQ factor scores predict if a student will persist from first-year to second-year based on the student's collegiate experiences and environment. The outcomes predict if a student will persist or withdraw from three Ohio rural community colleges.

The researcher employed the College Persistence Questionnaire to survey students at three rural, public community colleges located in Ohio. The target population consisted of approximately 480 first-year female rural community college students in fall 2017. This study has two independent variables (a) race, (b) pre-college experiences and other characteristics including parental education, first-year status, and enrollment status. In this study, there were two values for race (1) White—A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (Integrated Postsecondary Educational Data System, 2014), and (2) Minority—comprised of Hispanic/Latino, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, Two or more races, and Other (Environmental Systems Research Institute Diversity Index, 2012). This study uses the term “minority” to refer to non-White students. In this investigation, pre-collegiate experiences were characterized by the level of education a student’s parents achieved, a student attending college for the first time in the first year, or not, and a student persisting to enrollment in the second year, or not.

The dependent variable in this study is 10 CPQ factors and persistence is defined as continued enrollment within the same institution for the fall semester of a student's first and second year. In this research study, persistence was measured using the 10 factors of the CPQ: (a) academic integration, defined as positive views of instruction, instructors, and own intellectual growth; awareness of connections between academics and career; (b) social integration, defined as sense of belonging, shared values, and similarity to others; positive involvement behaviors; (c) degree commitment, defined as personal importance, students’ supportive network, value of degree; (d) collegiate stress, characterized by feelings of distress, pressure, and sacrifice; (e) advising, characterized by positive views of advising and school communication processes; (f) financial strain, defined as financial worries and difficulties; sense of disadvantage relative to others; (g) institutional commitment, characterized by level of loyalty, intention to reenroll, confidence in school choice; (h) academic motivation, defined as interest and enjoyment in academic tasks; willingness to spend extra time; (i) scholastic conscientiousness,

characterized as timely performance of academic responsibilities; and (j) academic efficacy, defined as confidence in academic skills and outcomes.

Research Questions

This study is guided by two research questions:

RQ1: What is the relationship between race and gender, and the ten CPQ factors (academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, scholastic conscientiousness, institutional commitment, academic motivation, and academic efficacy) for White and minority female students attending rural Ohio community colleges?

RQ2: What is the relationship between parental education and female students' demographic characteristics (White and Minority, first year and non-first year, and enrolled and non-enrolled) at three rural Ohio two-year public institutions?

Significance of the Study

Through an examination of the relationship between race and gender, and CPQ persistence factors for Minority and White female students in three Ohio rural community colleges, results of this study will contribute to the body of research by filling a gap in knowledge about rural community college student persistence. A review of the literature reveals the need for a better understanding of this phenomenon as rural community college student degree obtainment lags behind urban and suburban counterparts.

According to Kuh (2003), "the real key is not just what students are doing, but what institutions are doing that will lead students to the kinds of things that result in the desired outcomes" (Community College Survey of Student Engagement ([CCSSE], 2007, p. 7). The Agricultural Act of 2014 now includes rural communities in federal statute, allowing for leaders in federal agencies to enhance rural development. The objective of rural economic development is to increase revenue, cultivate a skilled labor force, eliminate barriers, and provide access to rural citizens. As a result, this study may benefit institutions as they make a commitment in their decision-making to recommend, enforce, and support institutional policies, practices, and support

systems to strengthen rural community college student persistence, and completion rates. Furthermore, rural community college students will also be able to utilize this research to understand the impact of race and gender identities on their persistence.

Assumptions, Delimitations, and Limitations of the Study

Creswell (2005) asserted weaknesses in quantitative research are linked individually to insufficient measures of variables, sample sizes, or lack of participants. In addition, miscalculations in measurement and other influences related to data collection and analysis may affect the results of the researcher's study (p. 199). This study has several assumptions, limitations, and delimitations.

It is assumed that participants have been honest and accurate when responding to the CPQ questions. It is also assumed that the (CPQ) is a valid and reliable tool in assessing persistence for Minority and White female students attending rural community colleges. The study population includes female students from three rural institutions, rather than a nationally representative sample of rural community college students, thus limiting the results to three institutions and other institutions with similar demographics. Thus, results are not generalizable to the wider rural community college student population. Additionally, male students and students under the age of eighteen were excluded from study participation.

A limitation to the present study is that the focus is on identifying best predictors for persistence. According to Lindheimer (year), "no two community colleges offer identical academic and social settings. Nor are any two-student bodies the same" (p. 15). Therefore, the researcher cannot predict with certainty which variables will be, the most critical determinants of engagement, persistence or retention before the CPQ is administered at an institution. At one college, institutional commitment may be a predictor, but have no effect on persistence decisions at another college (Lindheimer, 2011, p. 15).

Additionally, the findings of this study are based on responses of female participants from three rural community colleges in Ohio. Students' opinions about their college experiences are subject to change over time as they become academically and socially engaged in their college setting. As well as student enrollment may increase or decrease from year to year hence

changing the research findings. Therefore, college administrators, faculty, and advisors cannot generalize these outcomes. Last, this research study will measure the independent and dependent variables and analyze possible correlations among them.

Summary

Chapter 1 has presented the research problem, purpose of the study, research questions and methodology. The literature has revealed that rural communities are lagging in the share of adults who obtain a college degree (USDA, 2017). Furthermore, there is variance among college attendance and completion across gender, socioeconomic, ethnic and racial groups (Diel-Amen & Turley, 2007; Goldrick-Rab, Carter, & Wagner, 2007). There has been limited research on educational difference as it relates to rural regions, and relatively little is known about the role of pre-collegiate experiences and other student characteristics, including students' parental education, first-year status, and enrollment status, as well as best predictors for persistence of rural community college students. Using a synthesis of Terenzini and Reason's (2009) persistence framework, this investigation employed a quantitative approach to examining persistence factors for Minority and White female rural community college students to address the substantial void in the knowledge base.

Chapter 2: Review of Literature

This review of literature is organized around race, gender, enrollment, parental education and the College Persistence Questionnaire factors. The researcher was interested in persistence and the differences among White and Minority female students enrolled at three Ohio rural community colleges. The College Persistence Questionnaire (CPQ) was used as an instrument to gather data from White and Minority female students regarding their college experience and intentions to persist.

Ohio needs a larger and more talented workforce to meet the demands of the 21st century labor market with high quality 21st century education. According to the Georgetown Center on Education (2010), 57% of all Ohio jobs will require a post-secondary degree by 2018. Approximately 1.4 million adults in Ohio have attended college, but they lack a two-year or four-year degree.

An enormous amount of exploration has taken place concerning student persistence. Student achievement continues to be an area that researchers, institutions, and policymakers of higher education seek to understand and advance. Comparing research means identifying issues, framing questions, and presenting unbiased outcomes related to trends, attitudes, and behaviors (Creswell, 2009). Rural community college research is understated, and an additional focus on the rural community is overdue.

The research selected for this literature review is relevant to understanding rural-serving community colleges. Moreover, the review examines the climate of higher education and the labor market in Ohio. Finally, discoveries of the literature review focus on women and race differentiation, student persistence, student engagement, first-year experiences, and persistence factors.

Rural Communities and Community Colleges

According to Copeland, Tietjen-Smith, Waller, and Waller (2008), the United States Census of 1874 term rural, “describes a populace of a country limited of any municipalities with 8,000 or more individuals. The classification of the rural community today continues to evolve and

be reclassified and redefined” (p. 69). Rural colleges experience shortages in resources and extreme social needs to assist the disenfranchised (Jensen, 2003). The community college, Jensen (2003) asserts, can unite educators and social, political, economic, and labor market stakeholders to cultivate the necessary skills and resources to achieve new opportunities while developing communities.

The probability of students earning a college degree who live in an urban setting is higher than those students earning a college degree who live in a rural setting. In fact, the student population that meets the expectations of community college educators is the middle-class, not the poor and working-class student population that shapes the rural community college. According to Valadez (2006), attitudes and behaviors by faculty, staff, and students link attainment, social origin, and education. The investigation of this structure can determine if the social construction necessitates reordering.

The community college is qualified to be the instrument that eradicates inequality barriers that hinder student achievement. As an illustration, Miller and Tuttle (2006) shared, through self-identification, how rural community colleges can influence their constituents and community. If reformed strategically, the community college presence can affect the populace by transcending age, race, gender, and socioeconomic status. By introducing diversity and cultural activities, an educated workforce will be produced that can advance the rural community. Rural community colleges are a segment that can create, implement, and improve the economic structure, predict change, and develop quality of life to strengthen the country’s global economy and competitive advantage.

Rural community college budgets range from \$10 million to \$48 million, depending on size. These funds are considerably lower than those at community colleges which may have budgets over \$400 million. Relying on local and state-supported funding may be an impediment to students who need assistance to persist.

Community colleges are a venue where students can experience access and social mobility, but because of less fiscal resources, rural community colleges are limited in offering student programs and services, especially at small and medium institutions. Many students are

impacted because of the lack of weekend classes, distance education, accelerated courses, and childcare (Hardy & Katsinas, 2007). Therefore, rural community colleges must be innovative in delivering support to their students.

Research on rural community colleges can be important to build on past and present investigations. Researchers have provided qualitative research, but quantitative evidence of the influence of the rural community college and student persistence is minimal. Today, more researchers are focusing on providing empirical evidence based on student persistence.

Higher Education and Ohio Workforce

The University System of Ohio Board of Regents (2011) reports underrepresented populations must contribute to the Ohio labor market. Underrepresented students are defined as students of color, low-income students, adults, first-generation, and military veterans. Workforce demands will require Ohioans, by 2018, to have a two- or four-year degree.

Underrepresented populations have become an obstacle for the state to achieve educational and economic goals. For Ohio to meet educational and economic goals it may be key to utilize the skills and talents of underrepresented populations. Subsequently, untapped, underrepresented talent resides in rural, Appalachian and small areas of the state (University System of Ohio Board of Regents, 2011). The Board also indicated that often, marginalized populations, who live in rural areas do not persist to degree completion.

Ohio awards approximately 243 two-year degrees per 100,000 people statewide versus 256 two-year degrees at the national level. These figures indicate that the state is below the national average (University System of Ohio Board of Regents, 2011). In addition, irrespective of gender, White students are more likely to persist to degree completion and White students are more likely to return to school the second year. At Ohio community colleges, of students who return the second year, 63% are White and 42% are Black (University System of Ohio Board of Regents, 2011). College degrees awarded to women in Ohio are increasing. At the same time, college degrees awarded to Blacks and those who live in rural areas need to improve (University System of Ohio Board of Regents, 2011).

According to the American Community Survey (2009), 32.4% of White female students earned an Associate degree, and 24.4% of Black females earned an Associate degree. Nationally, 38.8% of White female students earned an Associate degree as compared to 27.3% of Black female students. This study examines persistence factors between first-year, Black and White, female, rural Ohio community college students to expand the research that suggests underrepresented populations in Ohio are essential to enhancing the labor force, detect at-risk students, and identify engagement and retention models.

Institution Comparison, Population, and Demographics

Table 1 provides enrollment, graduation and retention data from Integrated Postsecondary Educational Data System ([IPEDS], 2014) as a snapshot of the population attending Institution 1, Institution 2, and Institution 3. The locale of each rural community colleges noted is between 53-81 miles from Central Ohio to the North and Southeastern regions of the state. Families in these regions have a median income of \$29,000. Women have a median salary of \$21,380. Unfortunately, these families live 31% below the poverty level and unemployment rests around 23%, collectively. According to the 2012 United States Census, 82% of citizens, 25 years and older, have a high school diploma in the counties where Institution 1, Institution 2, and Institution 3 reside (U.S. Census Bureau, 2012).

Table 1.

IPEDS Individual Institution Comparison

	Community College One	Community College Two	Community College Three
Avg. Aid Received	3764	3786	4195
Full-time/ First Degree or Cert.	21%	7%	7.2%
% of total enrollment, women	51%	58%	63%
% of total enrollment, White	87%	88%	82%
% of total enrollment, Black	4%	6%	5%
Full-time retention	48%	43%	56%
Part-time retention	47%	38%	32%
Graduation rate, women	15%	20%	17%
Graduation rate, Black	9%	0	2%
Graduation rate, White	19%	21%	16%
Full time women degree/certificate, first-time	350	120	162
Total women degree/certificate, first-time	373	172	209

Reason (2009) suggested that sociodemographic characteristics continue to be significant because group differences in persistence rates remain. The inclusion of individual-level sociodemographic characteristics in persistence research allows for greater understanding of the conditional effects of interventions aimed at increasing student persistence (Pascarella & Terenzini, 1998). There is no one-size-fits-all approach that is “effective for all students, nor should we assume that interventions influence students in the same way” (p. 663). Previous research on sociodemographic characteristics (Peltier, Laden, & Matranga, 1999; Reason, 2003) found that “gender, race, ethnicity, and socioeconomic status were related to persistence in higher education” (p. 663).

Peltier et al. (1999) and Reason (2003) “concluded that gender was significantly related to persistence with women persisting at higher rates” (p. 663). Moreover, Leppel (2002) found that “sociodemographic variables (e.g. race) and situational variables affected persistence of both genders differently.” Therefore, targeted intervention plans must be specific to the needs of each gender (Reason, 2009, p. 663).

Women and Race Differentiation

Studies denote rural community colleges serve a large population of today’s full-time community college students. Approximately 41% of American students nationwide are enrolled in rural community colleges, surpassing the enrollments of urban and suburban community colleges. The dynamics of the female population enrolled in rural community colleges, according to Hardy and Katsinas (2009), is 55% full-time and 59% part-time; they earn 63% of the associate degrees awarded.

Planty et al. (2008) asserted in the 2008 National Center for Educational Statistics (NCES) report that truncated persistence and attainment rates among postsecondary students are linked to factors in the areas of poor academic preparation, enrollment status, lack of student engagement, work-life balance, background characteristics, cost of attendance, and financial aid. Specifically, when comparing educational status, the need to persist is vital to quality of life as it relates to employment and income factors between White and Black female students. Therefore, the disparity impacts the community at-large and the democracy the community college hopes to achieve.

Katsinas (2010) stressed that diversity is increasing at America’s rural community colleges. In the 2005-2006 academic year, 72% of White students and 56% of Black students were enrolled in community colleges nationwide. Also, Black students enrolled at small rural community colleges were 20% and 10% at medium rural community colleges. Rural community colleges serve 48% of first-time, full-time students, like urban and suburban colleges combined (Hardy & Katsinas, 2007). Moreover, a benefit of the rural community college is their function as a transfer pipeline generating 39% of transfer credit hours and 43% of all associate degrees (Hardy & Katsinas, 2007).

In 2006, according to the NCES, 28.5% of first-year White females and 31% of Black females elected to attend a two-year institution versus a four-year institution. By 2010, 72% of White females with an associate's degree or some college were active in the workforce, while 70.9 % of Black females were active in the workforce. The unemployment scale for White females with an associate degree or some college was 7.0%, while Black females with an associate degree or some college was 13.4%. The median income for White females with an associate degree or some college was \$30,220, and for a Black female, the median income was \$27,700.

Blacks and Whites that live in rural communities experience a disparity in wages. Many Black residents are significantly poorer than White residents living in rural communities. Starcher (2005) explains rural Blacks are isolated from mainstream society. The author indicated that, like urban Minority students, rural Minority students have lower test scores, high failure rates, oppose student engagement, and diminish education more than White students, therefore adding to their oppression (Starcher, 2005). According to Museus and Quaye (2009), exposure to higher education is significant for all students to navigate the social, political, and cultural landscape.

Many students of different ethnicities express they have faced some level of prejudice, racism, and discrimination at their institutions (Winkle-Wagner, 2009). However, Black students report their encounters more frequently than other students. Maxwell and Shammas (2007) assert "some Minority students feel uncomfortable in the classroom and experience loneliness and tokenism" (p. 353). According to Winkle-Wagner (2009), "institutions of higher education impose identity on students differently by race and gender, which shapes the students' experiences and success in college" (p. 12). Therefore, the researcher suggests the categories (i.e., race, gender, first-year experience, and persistence) of the research are justifiable.

Moreover, researchers suggest race, gender, and first-year experiences be included in new studies (Rayle & Chung, 2007-2008). Therefore, longstanding theories can be revalidated, modified, or new theories developed. Furthermore, giving policymakers new or updated data to create or adjust current or future policies is essential to providing student support programs and evaluating institutional commitment.

Student Persistence

According to Ross et al. (2012) in the *Higher Education: Gaps in Access and Persistence Study*, in 2010, White students had higher college enrollment rates (47%) than persons of two or more races (45%); and both of these racial- ethnic groups had higher enrollment rates than Native Hawaiians/Pacific Islanders (39%), Blacks (37%), Hispanics (31%), American Indians (28%), and Alaska Natives (19%).

Students pursue a college education with goals of obtaining a degree, certificate, or transferring to a four-year institution. Students have aspirations of establishing their careers built on the knowledge and application taught in college. The American dream implies that if you go to college and earn a degree, then you will secure a good job and become a productive citizen. However, students seldom consider the path travelled to obtain their degree. Undoubtedly, tests and trials in a student's life can deter him or her from pursuing a degree. Persistence can be a key factor in what makes a student overcome barriers to achievement. For the purpose of this study, student persistence will be defined as "the desire and action of a student to stay within the system of higher education from beginning through degree completion" (Seidman, 2005, p. 14).

According to Starks' (1989) study of rural community college female students at Community College of the Finger Lakes, revealed non-persisters were underprepared and had difficulty with their English courses. They either did not feel comfortable with the instructor or did not understand the assignments in general. Furthermore, non-persisters also struggled using the technology of that period, while the persisters felt the assignments were challenging and made them do introspective tasks that motivated them to persist. Additionally, persisters identified mentors to help them persist through college. Starks (1989) recommended that students set realistic goals with the help of their college advisors to navigate academic opportunities.

One aspect of persistence is assertiveness. The definition of assertiveness is "behavior which enables a person to act in his own best interest, stand up for himself without undue anxiety, to express his rights without destroying the rights of others" (Alberti & Emmons, 1970, p. 2). A study conducted by Yoshioka (2000) found that fundamental cultural, theoretical distinctions, in terms of an individual's connections and obligation to others, links cultural beliefs and attitudes

underlying interpersonal interaction, therefore alternating between proper and improper responses across the groups. The study disclosed how low-income White and Black women view cross-cultural values and roles differently, which may produce dissimilar behaviors regarding their assertiveness. This, too, may play a role in how they perceive information and interact within an educational setting.

There is an increase of female students attending two- and four-year institutions. The population of female community college students uses the institution as an entry point to higher education (Steinmann, Miller, & Pope, 2004). The objective is to enhance current skills or learn skills that lead to a new job, transfer position, or persistence to degree completion. According to Steinmann et al. (2004), female students often cope with academic challenges foremost, and secondly, financial challenges. According to the NCES, in 2004, most White and Black female students departed college for personal or financial reasons. Institution officials and policymakers can seek to understand this population and its apparent desires of a sense of accomplishment. To support them, current recruitment, orientation programs, and support services can be evaluated. The promotion of campus resources and discovering pioneering ways to extend programs and services to students can position the community college as a distinct destination that creates pathways to success (Steinmann, Miller, & Pope et al., 2004).

In addition, Robbins et al. (2004) stated that “academic goals, academic self-efficacy, and students’ sense of academic skills were all related to persistence” (p. 665). Tross et al (2000) found linear and non-linear relationships among first-to-second year persistence and student conscientiousness, defined as the students’ relative tendency to complete assignments thoroughly” (p. 665). Brown et al. (2008) “found strong positive relationships between self-efficacy, educational goals and college persistence” (Reason, 2009, p. 665)

Barriers to Persistence

According to Burns (2010), President Obama has turned to the American community college to combat the economic challenges the United States faces. His objective is for five million graduates, by 2020, to increase the labor market. President Obama affirms community colleges must be the architects of understanding and meeting the unique needs of their students.

However, community colleges must identify and remove barriers for students to persist to completion. Goldrick-Rab (2007) explained that part-time student enrollment may affect a student's opportunity to receive optimal financial aid to pay tuition. Findings suggest, students who receive financial aid persist more than those who do not. Students who receive wages through unsubsidized employment have expressed relinquished earnings when attending college (Goldrick-Rab, 2007).

In addition, if remedial coursework in math and English is not part of a student's plan of study, the likelihood of them persisting is poor. Often, early coursework in English and math can be the conduit that links students to persistence (Goldrick-Rab, 2007). The challenge with college remedial coursework is that it does not count toward students' graduation requirements.

Williams and Luo (2010) examined first-year students' geographic location and the impact on student persistence. Applying models by researchers Astin (1984), Bean and Metzner (1985), and Pascarella and Terenzini (2005), the authors unveil proximity to home and campus has a positive impact on the first-year experience. Taken into consideration are the college size, location, student activities, completion rate, and attitudes. Institutional commitment through policies and practices affect student persistence. The authors also discovered that urban and rural students have diverse backgrounds and their foundations are quite different.

Promoting Persistence

According to Porter (2004), an investigation into persistence factors, based on student behavior, showed the difference between dropouts and transfer-outs. Each type of student considered the outcomes of their decisions to persist or not to persist. For example, a transfer-out may be concerned with the creditability of the institution or program of study, while a dropout may not have the student support mechanism needed, like tutoring, to be successful.

Equally, institutions can implement strategies to increase student retention before they withdraw or quit, by applying exit surveys, transcript requests, and the aid of the National Student Clearinghouse (NSC). The focus to identify students in advance and assist them according to their own personal needs may prove invaluable.

Parental Education

Pascarella and Terenzini (2005) explained that researchers have discovered that relationships between parental education and persistence of children exist. Rendon et al. (2000) believed that inclusion of family relationships should also be considered when examining persistence among students of color. More research study between family involvement and student persistence is needed, so researchers can build upon the current research and understand its significance.

Student Engagement

Pike and Kuh (2005) asserted that student engagement, institutional policies, and practices impact the levels of student engagement. This engagement is significant for a student to move through the college pipeline to completion. A student's experiences motivate him or her to persist. The challenge is demonstrating that relationships do exist among pre-college traits and student engagement (Pike & Kuh, 2005).

However, the student and institution may be better served if they were in partnership working towards the same goal. Both parties have ownership in accelerating the student to degree or certificate completion. The National Survey of Student Engagement ([NSSE], 2014) classified five standards as guiding principles: (a) level of academic challenge; (b) active and collaborative learning; (c) student faculty interaction; (d) enriching educational experiences; and (f) supportive campus environment. Nurturing the five standards can cultivate institutional improvement, collaborative learning, and student engagement (Kuh, 2003).

Kuh et al. (2008) explained that unprepared and underserved students are served better by their institutions when they provide (a) academically challenging work; (b) constructive feedback; (c) advising/mentoring by faculty and peers; and (d) supportive environments. Additionally, high levels of engagement with students yield high results. Therefore, students are satisfied and persist, and low levels of engagement with students generate dissatisfaction and non-persisters.

NSSE Benchmarks (2014) findings stated that full-time female students are more engaged in their academic careers than male students. When students participate in cultural

diversity and learning community activities, their commitment to succeed is greater. At the same time, Black and White students encounter contradictory experiences even though their efforts to engage are similar (Kuh, 2003). Although discoveries suggest Black and White students are committed to scholastic achievement, Black students have lower grades and graduation rates.

Additionally, the Community College Survey of Student Engagement (CCSSE) conducts an annual survey to inspect educational practices in community colleges. The purpose of the survey is to identify areas of improvement to enhance student outcomes. Those outcomes are intricately aligned with CCSSE's national standards. The five traits CCSSE promotes as successful practice include (a) academic challenge; (b) active and collaborate learning; (c) student effort; (d) student-faculty interaction; and (e) support for learners (CCSSE, 2014).

Studies confirmed, the more a student engages in his or her studies, with peers, faculty, and staff, the probability of the student's academic success increases (Kuh, 2003). According to CCSSE (2014), their benchmarks target institutional practice and student behavior that foster student engagement linked to student persistence and learning. Listed in Table 2 are the 2014 results for the two-year rural-serving institutions investigated during this study. Institution two did not participate in the 2014 CCSSE annual survey. Therefore, Table 2 results listed for Institution two are reflective of the 2013 administration. Table 2.

CCSSE Benchmark Scores Report: Main Surveys 2013-2014

Benchmark	Community College One Score	Community College Two Score*	Community College Three Score
Active and Collaborative Learning	58.1	52.4	52.0
Student Effort	48.3	52.3	50.1
Academic Challenge	47.0	59.2	57.0
Student-Faculty Interaction	56.8	53.9	52.0
Support for Learners	45.5	48.5	51.5

Moreover, Table 2 results illustrate if each community college is executing all benchmarks above or beneath the mean score of 50. The mean score is constant at 50, while the standard deviation is 25 (CCSSE, 2014). Indicators show in Table 2, that effective educational practices are above the mean score in most benchmarks. However, opportunities for new or modified best practices, institutional models, and policy development remain obtainable. Bailey (2006) explains the 21st century American community college is the nucleus of future academic policy, directed at underrepresented, underserved, and underprepared factions. By utilizing CCSSE data, rural-serving community colleges contribute to the needs of their students and labor force through policy and curriculum (Bailey, 2006).

First-year Experience

The first-year experience model for students should encourage student persistence and academic engagement. In addition, first-year experience programs should connect students to the institution through their coursework and the student's future academic goals. Cornell and Mosley (2006) asserted that real-life experiences woven into the first-year experience program at Paradise Valley Community College has led to student success. A community that promotes campus life and supportive learning is needed for students transitioning into college. Obtaining student achievement can be accomplished through cultural awareness, service learning, and faculty and staff support (Cornell & Mosley, 2006).

Further, studies suggest that socioeconomic background, institutional policies, and remedial education are associated with student persistence and academic achievement during a student's first-year experience. The first year is known to be the hardest year of a student's college experience. Academic stress may be customary due to a lack of coping strategies and social support. Sand, Kurpius and Rayle (2005) asserted that gender is related to levels of academic stress, and social support from family and friends. According to Rayle and Chung (2007-2008), female students confront more academic pressure and report more supportive friends than male students. Researchers urge additional research concerning first-year college experiences and the correlation of gender, race, demographics, and psychosocial factors.

Institutional Commitment

The community college system in Ohio consists of 23 public-two-year institutions. But only one-third of the 88 counties throughout the state have a community college (Dougherty, Marshall, & Soonachan, 2006). These colleges are locally- and/or state-funded institutions, which practice an open enrollment process for accessibility. Community colleges, like the three colleges studied in this work, are looking to increase their graduation rates among low-income and Minority students while defining student success. Recommendations to accomplish this objective include short-term classes, satellite branches, convenient hours, and fractional credit (Dougherty et al., 2006).

In the meantime, it may be beneficial if institutional and political leaders conducted an analysis of current policies affecting and infecting the growth of student success in the state. The ability for low-income, minority, and rural students to persist may be tied to current state policies. The economic and workforce growth may begin with the linchpin of low-income, underserved, and underprepared students in rural communities that are invisible. When policies complement the rural community college constituency, progress ought to manifest. On the other hand, institutional leaders within the state are not obligated or encouraged to use performance data to lead their institutions (Dougherty et al., 2006).

The University System of Ohio Board of Regents (2006) reported access measures are based on age, gender, income, and ethnicity. But success measures are identified by community colleges only, not gender, ethnicity, or socio-economic status. Success measures include but are not limited to a) time to degree; b) graduation; c) retention; d) grade point average; and e) transfers.

Because of the fiscal deficiency regarding education throughout the state, higher education is suffering. Several institutional leaders feel community college legislative policy is not an urgent matter (Boswell, Palmer, & Pierce, 2006). Dougherty et al., (2006) affirmed that Ohio policies concerning community colleges funding, remedial education, institutional research, academic/non-academic counseling, access, and transfer policies need expansion and structure. To date, these policies are loosely structured, interpreted, and practiced.

College Persistence Questionnaire Components

To increase retention, colleges and universities are taking a hands-on approach towards identifying and developing student's academic skill-set. Administrators, faculty, and staff are engaging students by means of additional instruction to keep them enrolled. One method uses the student experience form created by Beck and Davidson (2009). The 10 tested and validated categories listed evaluate a student's response to the college's academic and social domains (Beck & Davidson, 2009).

Academic Efficacy. Self-assurance in one's academic capacity and desired results.

Academic Integration. Tangible attitudes towards instruction, self-awareness in one's cognitive development and the relationship between scholastic and professional interests.

Academic Motivation. Satisfaction and attention to academic assignments.

Advising Effectiveness. Positive perspectives towards processes and procedures related to advising and college communication.

Collegiate Stress. Emotions or feelings of sacrifice, difficulty, and duress.

Degree Commitment. The significance a student and their support group place on degree attainment.

Financial Strain. Financial fret and/or challenges.

Institutional Commitment. Belief in college selection, intent to re-enroll, and allegiance to the college or university.

Scholastic Conscientiousness. The execution and completion of academic obligations/works in a timely manner.

Social Integration. An affiliation and common values with others; the display of constructive participation, and behaviors.

Quality Assessment

The assessment of quality for such studies for students can be observed by several methods, such as measuring the improvement of quality of student learning. According to Kuh et al. (2008), evaluating the effects of grades and persistence between first-year students is purposeful. Also, measuring student activities and engagement as they relate to grades and persistence is essential. Furthermore, the nature of students' early academic experiences and background characteristics is critical. Students, staff, faculty, and administrators can assess new or enhanced institutional programs, policies, procedures, and their positive or negative impact. Measuring retention rates between persisters and non-persisters and their income is a quality mechanism (Kuh et al., 2008).

Research Perspective

According to Astin (1984), the more engaged students are in the classroom and extracurricular activities, the more they persist for academic success. Tinto (1993) hypothesized that students attend college with preconceived and non-linear patterns of scholarly attributes, family, and personal ideas. According to Tinto (1988), adjustments are continuous regarding a student's viewpoints and objectives as it relates to engagement in academic and social systems.

Major writers and researchers discussing the rural community college include Katsinas (2010), Killacky and Valadez (1995), and Smith (2005). These authorities write about the role, contributions, and significance of the rural community college. They discuss the uniqueness of the rural community college and its impact on the rural community and its constituents, as well as the impact rural community colleges can have on the advancement of economic and workforce development. Rural community colleges invite all students irrespective of pedagogic preparation, experience, heritage or wealth to cultivate new opportunities. The upward social mobility can affect poverty, illiteracy, and underemployment rates in rural communities in a positive manner (RCCA, 2013).

Katsinas (2010), Killacky and Valadez (1995), and Smith (2005) explained that the rural community college should be more involved in local, state, and federal policies and procedures. Furthermore, if policymakers engage rural community colleges more and treat them as visible

partners, it would be beneficial. They also revealed that rural community colleges are an added value to the overall initiatives and goals of higher education adding strong enrollment numbers, a diverse student population, and achievement objectives comparable to urban and suburban community colleges. However, budget strains make the rural community college vulnerable to access, student programming and services, economic stability, and student financial aid. Last, major writers (Katsinas,2010; Killacky & Valadez,1995; Smith, 2005) expressed rural community colleges are willing to implement innovative strategies (i.e., housing, data, sustainable communities, corporate partnerships) to serve their constituents through policy, practice, and leadership

Research Comparison and Influence

According to Cassell and Daggett (2010), people, in general, are members of many groups (e.g., family, friends, neighbors, co-workers, peers, church groups, clients). The contribution to our learning from each group is different and greatly enriched by the diversity in culture, age, gender, ethnicity, religion, income, and life work experiences. Interaction with such diverse populations can enhance a student's ability to learn while collaborating with peers.

Kolb (1994) and his theory of experiential learning provides a universal prototype of the education process and a linear model of adult growth, dependent on what we know about how people learn, grow, and develop. Student knowledge is cultivated through their experiences, which may affect persistence. Kolb's learning concepts include diverging, assimilating, converging, and accommodating. Students who have a diverging learning style have cultural interest, like to work in groups, and gather data (Kolb, 1994). Assimilating learners think in abstract models and focus on succinct logical patterns. The converging learner favors practical ideas and prefers technical undertakings, while accommodating learners act on instinct versus coherent inquiry and desires hands-on experiences (Pascarella & Terenzini, 2005).

In addition, Tinto's (1993) theory of student departure expressed persistence as necessary for students to assimilate into formal academic performance and informal scholarly systems, while formal extracurricular activities and informal social systems address the students' need to resolve the student withdrawal process concerning academic challenges, career goals,

social activities, and campus life (Pascarella & Terenzini, 2005). While Astin (1984) explained that the more engaged students are in the classroom and extracurricular activities, the more they persist for academic success. This population of students is content with the overall campus environment and finds harmony between the psychological and sociological explanations of student development. The inputs, environment, and outcomes provide students the ability to discover and foster innovative concepts (Astin, 1984). The ability to merge physical, biological, physiological, psychological, social, and environmental factors supports the institution in creating and cultivating student progression (Walker, 2008).

Theoretical Framework

The framework of Terenzini (2005) and Reason (2009) included four benchmarks that impact student results: student pre-college characteristics and experiences, organizational context, student peer environment, and individual student experience. These four benchmarks support Davidson et al., (2009) in regards to ten college persistence factors by examining students in a comprehensive approach, starting with the student's pre-college characteristics and their individual student experiences based on the scored CPQ factors, which predict persistence. The framework detailed the relationships of students, faculty, and institutional influences that impact college success. Lastly, the benchmarks provided guidance and examined the importance of student persistence.

The model postulates that some fact or truth must exist regarding a student's academic, personal, and social attributes and backgrounds (Reason, 2009). The objective of student persistence research is an inquiry to seek and understand "multiple concentric environments they inhabit, recognizing that different students engage differently within those environments" (Reason, 2009, p. 662).

Reflection on the Literature and Issues

Researchers such as Astin, Bean, Metzner, Pascarella, Tinto, Terenzini, and others have explored persistence levels, institutional commitment, and persistence factors. College-impact theorist, Astin (1984), shared in his theory of involvement that inputs, environment, and outcomes

cultivate directly or indirectly the college environment. Academic and social opportunities afford students the ability to engage in innovative ideas. He also stated that past school performances are predictors of study skills required for academic success in college. Bean and Metzner (1985) regard persistence as a complex interaction between the student and the institution. Their attrition model showcased how viewpoints shape attitudes and how mindsets forms performance. They expressed that non-traditional students are affected less by campus social assimilation than traditional students.

According to Tinto (1993), negative and positive influences increase or decrease students' investment in their personal collegiate experiences. The greater the involvement, the more likely the student will persist. Student engagement positively relates to persistence and is "the single most significant predictor of persistence" (Harper & Quaye, 2009, p. 4). According to Tinto's research, undergraduate students depart their institution early because they feel disconnected from peers, faculty, and other staff (Harper & Quaye, 2009). Conversely, students who persist showed "higher levels of integration into academic and social communities on campus lead to higher levels of institutional commitment" (Harper & Quaye, 2009, p. 4). Pascarella and Terenzini's (2005) general model for assessing change, evaluates student change and reviews the direct and indirect consequences of the institution's environment or structural characteristics. Pascarella and Terenzini's (2005) research concluded that student interaction with faculty is vital to student persistence.

Being mission-minded, community colleges seek ways in which to ensure that their students are successful in persisting. However, there are variances between gender, ethnicity, student status (e.g., traditional or non-traditional student), urban, metropolitan, and rural community college persisters and non-persisters. The dynamics that make up the community college student population and institution are different and therefore provide a reason to discover more about rural community college first-year, female students.

The objective in contributing to the body of knowledge is to differentiate between the persistence factors and levels of persistence that lead to achievement in the rural Ohio community college for White and Black first-year female students. This study will identify

persistence barriers, recommend institutional ideas to improve institutional policies and practices and recommend future research. Tinto (2006) asserted that “although retention and persistence studies have helped indirectly, what is desirable is a plan for institutional action, which allows two-and four-year colleges to heighten persistence of their students” (p. 6).

Katsinas (2010) asserted that rural community colleges are invisible in research, practice, and policy, making them indistinguishable and hiding the differential factor. Again, rural community colleges bring workforce and economic development to a unique community rampant with poverty, illiteracy, and underemployment. Both White and Black females are a significant part of the rural landscape. Their persistence in scholastic achievement is important to the quality of life in the home, workplace, and society. Rural community colleges can adapt quickly to the needs of their students and community (Smith, 2005).

The research intends to assist three rural Ohio community colleges regarding persistence by identifying persistence barriers and recommending institutional ideas to improve institutional policies and practices. An advantage of rural community colleges is their ability to focus on instruction and the student. The researcher’s contributions look to assist three community colleges by identifying who is at risk, why they are at risk, and how the institutions can implement new programs or modify programs, policies, or procedures. The objective is for these students not to prematurely stop out or drop out. According to Smith (2005), more working adults are returning to college, and requiring a variety of services and programs. Enrollment difficulties are prevalent in a shrinking competitive market and service areas of rural regions. Additionally, enrollment management continues to be a concern as funding moves from state to local entities. Overall, preserving students in the academy and addressing their needs is important to fulfilling the completion agenda. According to the American Association of Community Colleges (2011), the completion agenda urges degree completion of five million community college students by 2020. The rural community college has a role in the advancement of the 21st century community college completion agenda.

Summary

Chapter 2 provides an exhaustive review of literature on rural communities and community colleges. Specifically, the literature review highlights Ohio higher education and the workforce, race and gender differentiation and community college student persistence.

The rural community college and its students, like urban and suburban institutions and their students, are part of the higher education linchpin. Rural community college leaders and policymakers may be more effective if more visible. Their presence in discussions at all levels-- local, state, and federal--can be imperative to the economic success of their students and communities.

The larger impact of this research is the domestic impact rural community colleges have on higher education achievement initiatives. More researchers assert that decades of student departure studies have been investigated. However, scrutiny exists for the lack of empirical verification. Now, investigators are re-examining college persistence through empirical research.

The most important explanatory consideration is the interrelation of various factors that include, but are not limited to, "demographics, aspirations, motivations, personality, values, and institutional characteristics" (Harvey-Smith, 2002, p. 2). The community college can change the quality of life for its students, through partnership between the institution, students, and policymakers, with all involved seeking to understand their role, limitations, and resources.

Chapter 3: Methodology

The purpose of this quantitative study was to examine the scored CPQ persistence factors of Minority and White female students at three Ohio rural community colleges. The study also examined the precollege demographic characteristics of female Ohio rural community college students. (Davidson et al., 2009). This chapter describes the research design, research questions, population and sample, instrumentation, procedures for data collection, and the data analysis employed in the study.

Research Design and Approach

According to Creswell (2009), research designs are strategies and practices that span decisions from broad assumptions to detailed methods of data collection and analysis. The research design is a proposal to conduct research, which involves the intersection of philosophy, strategies of inquiry, and specific methods. The overall decision involves which design should be used to study a topic.

A quantitative research design is a methodology used to test concepts examining relationships between variables. Variables are often measured so numeric data can be evaluated applying statistical procedures. Additionally, quantitative strategies include survey research.

Creswell (2009) posited that survey research is a numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. The current study is comparative in nature where two or more groups are compared. By using this approach, Creswell (2009) asserted that “the researcher can examine theories deductively, prevent bias, control explanations and simplify and duplicate findings” (p. 4). The questions utilized in the researcher’s design will compare, relate, or describe the independent and dependent variables’ association.

Research Questions and Hypotheses

The purpose of the research questions was to examine the persistence of first-year, Minority and White female, rural Ohio community college students. The research questions reflect

the literature by identifying and examining those factors and risks, which are obstacles or weaken student persistence. Additionally, the research questions were created to structure and focus the purpose of the quantitative study. Student persistence is defined as “the desire and action of a student to stay within the system of higher education from beginning through degree completion” (Seidman, 2005, p. 14).

The research questions pertain to these students as first-time degree-seeking students in the state of Ohio, regardless of enrollment status (full-time versus part-time), by focusing on the 10 CPQ persistence factors.

1. Are there differences in the ten CPQ factors (academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy) among White and Minority students, first year and non-first year students, and enrolled and non-enrolled (persisters and non-persisters) female students at three rural Ohio community colleges?

H₀₁: There is no statistically significant difference in the ten CPQ factors among

White and minority, first year and non-first year, and enrolled and non-enrolled female students at three rural Ohio community colleges

2. What is the relationship between female students' parental education and their demographic characteristics (White and Minority, first year and non-first year, and enrolled and non-enrolled) at three rural Ohio two-year public institutions?

H₀₂: There is no statistically significant relationship between female students' parental

education and their demographic characteristics (White and Minority, first year and non-first year, and enrolled and non-enrolled) at three rural Ohio two-year public institutions

By concentrating on the following area--student background, advising institutional commitment, academic and social integration, degree commitment, academic efficacy, academic motivation, financial strain, collegiate stress, Scholastic Conscientiousness—valid results indicate whether students will persist for a second year. These areas provided data on why students

decide to withdraw or drop out of college. Preeminent factors that distinguish persisters from non-persisters are recognized as they pertain to rural, community colleges participants in the study. Outcomes can aid educators and legislators in creating retention intervention models (Davidson et al., 2009).

Research Setting

The descriptive design involved collecting data from three rural two-year public community/technical colleges with a combined enrollment of 11,000 students located in Marion, Nelsonville, and Rio Grande, Ohio that had a population of 42,465 residents collectively. Nearly 96% of the students were Caucasian and 4% (approximately 1700 citizens) are African American. The combined female full-time enrollment was approximately 3,754 female students, with a total student body retention rate of 56%, and a graduation rate of 27%, on average. The standard age of a learner was 28 years old with a yearly salary of \$18,500. The poverty level for these females, families, and communities was 56.7% of the national average.

Population and Sample

The quantitative research design involved collecting data from students at three rural, two-year public colleges located in Nelsonville, Marion, and Rio Grande, Ohio. The characteristics of the female students who participated in this study were White and non-White Minority, currently enrolled, first-year to college (first year, non-first year), and enrollment (enrolled, non-enrolled) in fall, 2017.

The target population for this study was 480. The sample size was determined by using an online sample size calculator that provided the number of sampling and/or observation needed for a measurement. A 95% confidence level, 5.77% confidence interval, and 50% normal distribution were used in the calculations for optimum sample size. Out of the 480-targeted population, there were 190 respondents who participated in the study. Out of that 190, nine of the responses were incomplete and were omitted—leaving a total of 181 completed responses that were analyzed. Thus, the 181 completed responses represented 128 White and 53 Minority female students with a response rate of 38%.

Instrumentation

The CPQ is an instrument developed by researchers Davidson et al. (2009). The intent is to provide institutional administrators a means to identify at-risk students, why they are likely to drop out, and determine persistence factors between persisters and non-persisters (Davidson et al., 2009). A 60-item questionnaire was employed, and ten factors were analyzed: academic efficacy, academic motivation, institutional commitment, financial strain, degree commitment, collegiate stress, academic and social integration, advising, and Scholastic Conscientiousness. The 10 factors were examined based on a five-point Likert-type scale. A sixth option was included for those students who felt a question was not applicable.

The CPQ is an instrument that predicts student attrition. According to Davidson et al. (2009), the CPQ is utilized to create intervention programs or enhance college student retention models because of the foci on persistence characteristics within the first six to eight weeks of the semester. The CPQ provides researchers and institutions results that allow them to customize their own retention programs while adapting institutional policies and procedures if needed. The CPQ instrument involves collecting quantitative data and delivering numeric descriptions of trends, patterns, opinions, and attitudes of the sample population (Creswell, 2009).

CPQ-V2 is composed of two main components: the Student Background Form and the Student Experience Form. The Student Background Form asks students to report information that requires little or no experience with the academic and social environments. Moreover, the Student Background Form includes student information (e.g., sex, race, graduating class size, native language, financial aid, standardized test scores, and high school rank) but not all (e.g., reason for attending, parent's education) student information is included on the Student Background Form. College representatives typically collect the Student Background Form prior to matriculation.

The Student Experience Form is composed of questions that require some interaction with the institution, such as: "In general, how satisfied are you with the quality of instruction you are receiving here?" and, "How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?" This section consists of 60 items making up ten

factors. Questions were answered on a 5-point Likert-type scale. A sixth option, not applicable, was included for students who felt that an item did not pertain to them (e.g., issues of on-campus housing or services for commuter students).

CPQ Demonstrated Use Community College/Reliability and Validity

The American higher education system continues to struggle while other countries' educational structures are said to be thriving. According to the American Association of Community Colleges (2011) completion challenge data, "only three of 10 students who start at community colleges full-time graduate with an associate's degree in three years" (p. 1) Minority populations suffer even lower credential and completion rates. In addition, many students at community colleges are underprepared when they are admitted. Often, many of these students are required to enroll in remedial course work.

Moreover, the affordability of a college education is diminishing in the community college. The Community College Completion Corps (2010) asserts, tuition rates have increased by 200% and by 7.3% since 2009. Affordability is a feature of degree transfer and degree completion. The adverse effects of students not completing a degree have long-lasting economic consequences on our society (U.S. Department of Education, 2016). These effects are associated with a lack of student income and quality of life, a deficit in the labor market, and workforce skills. The outcomes are important to policymakers and educators, as President Obama called on support from community colleges in his 2009 *Democracy's Colleges: A Call to Action* (The White House, Office of the Press Secretary (2009).

Massive sectors of American college students do not complete their education (Education Commission of the States, 2004). There is no exact science to determine which students will persist or will not persist in completing their degree goals. When it relates to persistence, features of the institution such as size, location, degree type, institutional control, and student background impact persistence and retention rates. Researchers have found a "one-size-fits-all" approach is not germane.

According to Tinto (2006, 2007), "We have come to understand how the process of student retention differs in different institutional settings, residential and non-residential, two- and

four-year” (p. 4). Davidson et al. (2009) insist that individualization for students and the institution is significant. The CPQ is an instrument that utilizes an individual approach to proactively identify barriers that will hinder student persistence. The CPQ for this research was created to overcome limits of generalization implied throughout higher education. Students in two- and four-year colleges persist, stop-out, and dropout for a variety of reasons. The CPQ is designed to measure factors linked to persistence and retention to aid the institution and its students. The CPQ identified at-risk students and their reasons for suspending their academic pursuits and variables that differentiate persisters from non-persisters at their institution (Davidson et al., 2009).

The researcher selected the CPQ as the instrument of choice because the student experience factors of the CPQ consider the variables of constructing institutional effectiveness. The ten components included academic and social integration, financial strain, collegiate stress, advising, degree and institutional commitment, academic motivation, academic efficacy, and Scholastic Conscientiousness. When utilizing the CPQ, the guiding principles can target variables empirically related to persistence in other research, indicators are consistent with other themes in previous research, and the variables have been used in preceding research on diverse student populations (Davidson et al., 2009). The CPQ empowers institutions in creating and fostering persistence and intervention programs. Another feature of the CPQ is the ability to administer the test online or face-to-face. In addition, the questionnaire took approximately 60 minutes to administer and is easy for participants to understand. The questionnaire captures valuable data pertaining to the student’s college experience within the first six to eight weeks of the semester.

Validity was confirmed using a direct logistic regression. Davidson et al. (2009) were able to assess the validity of the CPQ survey instrument by administering the survey to first-semester freshmen then predicting if they returned their sophomore year by using scale scores. CPQ answers were translated to favorability scores based on the ten components. Mean scores were computed and outliers were identified to ensure the validity of the students’ responses. Sixty-six percent of the participants were correctly classified from the logistical regression the researchers conducted. Retention was the outcome and mean scores on CPQ factors acted as predictors. An analysis of the model determined the statistical significance against the Nagelkerke R

Squared index that implied the set of CPQ factors' reliability between persisters and non-persisters (Davidson et al., 2009). The CPQ reliability was acceptable with an average Cronbach alpha score of $\alpha = 0.70$ for all factors (Davidson et al., 2009).

The dynamics of the questionnaire and research considered theories from Kuh (2003), Astin (1984), and Tinto (2006, 2007) to add insight into variables that examine persistence, and some are categorized under the components that made up the CPQ. Kuh's theory of student engagement (2003) discovered student engagement correlates to specific educational activities and academic grades between a student's freshman, sophomore, and senior years. Student engagement predicates on behaviors affecting teaching practices, programmatic interventions, and learning communities (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Furthermore, engagement has a compensatory effect on first-year grades and persistence to the sophomore year while students attend the same college. By utilizing the National Survey of Student Engagement (NSSE), Kuh et al. (2008) were able to link ethnicity, gender, institutional background, grades, income, and persistence to student engagement. When students take accountability for engagement and decision-making in their daily activities, they become devoted to the college and their studies (Kuh et al., 2008).

Astin (1984) explained that the greater the student involvement in college, the greater the amount of student learning and personal development. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. The student involvement theory focuses on the motivation and behavior of the student. The three elements include inputs (demographics), environment (experiences), and outcomes ([attitudes/values], Astin, 1984).

To ensure the viability of the data in this study, any reversed or regular items on the CPQ were recoded to favorability scores using SPSS. After scoring those items in SPSS and determining point values for each item, this researcher scored each of the ten factors by summing the related items of those factors. A reliability test for each factor was conducted. Internal consistency for each of the CPQ subscales was examined using Cronbach's alpha. Academic Integration (7 items; $\alpha = .74$), Financial Strain (4 items; $\alpha = .80$), Social Integration (7 items; $\alpha =$

.736), Advising (4 items; $\alpha = .72$), Institutional Commitment (4 items; $\alpha = .70$), and Academic Efficacy (5 items; $\alpha = .72$) were all found to be moderately too highly reliable. Degree Commitment (6 items; $\alpha = .63$), Collegiate Stress (4 items; $\alpha = .69$), Scholastic Conscientiousness (4 items; $\alpha = .69$), and Academic Motivation (8 items; $\alpha = .59$) were all found to be relatively low in terms of reliability.

While Degree Commitment, Collegiate Stress, and Scholastic Conscientiousness were relatively low, they still were within a reasonable and acceptable range. Academic Motivation was the only factor that fell below reasonable range; however, the Center for Community College Student Engagement (CCCSE) advocates that high impact practices in the form of student success courses, academic goal setting and planning, along with student alert and intervention practices are significant. For example, the Houston Community College System (HCCS) requires all “students enrolling with 0-12 credits enroll in their college success course. HCCS teaches life and job readiness skills, which has improved student persistence” (CCSSE, 2013, p. 17). At Zane State College, faculty, staff, and students partnered to create Finding Inspiration Together (FIT). “They yielded a 10% increase in retention by identifying that the college student relationship begins at the first point of contact and not the first day of class” (CCSSE, 2013, p. 9). Northeast Alabama Community College implemented an early alert and intervention process by pinpointing students who are experiencing academic and attendance difficulties. By doing so, the administration and faculty provided wrap around services in the areas of support and tutoring (CCSSE, 2013). Therefore, if community colleges engage in low-impact practices, they should anticipate low student engagement and student outcomes. One could hypothesize that the lack of student motivation is due to the absence of high impact practices. Thus, this researcher believes that the *Academic Motivation* factor is important to examine and warranted in this study.

Furthermore, in looking at the Total CPQ score for all ten factors (54 items, $\alpha = 0.88$) the researcher’s reliability average score presumed to be highly accurate and reproducible. Despite having four out of the 10 factors with low reliability scores, the researcher, with confidence, was able to move forward with the analysis of all ten factors. The total CPQ score is the 54-item

survey that constitutes each subscale for all ten factors. Table 3 presents the reliability of each subscale investigated as it relates to survey items and their overall scores. Table 3.

Reliability of Participants' Survey Subscales and Items

<i>CPQ Subscales</i>	<i>CPQ Items</i>	<i>Reliability Results</i>
Academic Integration (7 items)	(1, 13, 20, 28, 36, 43, 57)	$\alpha = 0.74$
Financial Strain (4 items)	(9, 15, 29, 46)	$\alpha = 0.80$
Social Integration (7 items)	(2, 14, 24, 30, 38, 44, 51)	$\alpha = 0.74$
Degree Commitment (6 items)	(3, 17, 27, 32, 41, 58)	$\alpha = 0.63$
Collegiate Stress (4 items)	(4, 18, 33, 50)	$\alpha = 0.69$
Advising (5 items)	(5, 19, 34, 48, 56)	$\alpha = 0.72$
Scholastic Conscientiousness (4 items)	(7, 21, 37, 52)	$\alpha = 0.69$
Institutional Commitment (4 items)	(8, 22, 59, 60)	$\alpha = 0.70$
Academic Motivation (8 items)	(6, 11, 16, 23, 31, 39, 45, 53)	$\alpha = 0.59$
Academic Efficacy (5 items)	(10, 25, 40, 47, 54)	$\alpha = 0.72$
Total CPQ Score (54 items)		$\alpha = 0.88$

Procedure

The researcher requested participants to read, sign, and date the Participant Consent Form (see Appendix #2) prior to completing the CPQ. Participants were informed that the purpose of the CPQ was to identify their views regarding their college background and experiences. All the participants were reassured that their questionnaire responses are confidential. The participants from three community colleges located in rural Ohio responded to the CPQ during their first semester of their freshman year, administered by the researcher. According to Mortenson (2005), a student's persistence, freshman to sophomore year, is frequently utilized to measure retention.

Data analysis and Level of Significance

Once the questionnaire process was completed, the data were analyzed to determine if any differences or relationships existed among female students at three rural Ohio community colleges with the ten CPQ factors and parents' education based on race (White, Minority), whether they were first year to college and enrolled. Descriptive statistics were utilized to explore demographic characteristics of the female students in this study. Inferential statistics (Multivariate analysis of variance [MANOVA], Multivariate linear regression, and Chi-square) aided the researcher in organizing and describing the data results of the target population. According to Gail, Gail, and Borg (2007), the level of significance in a study is represented by the alpha symbol α . Significance is used to determine whether the null hypothesis can be rejected. It is common in educational research to reject the null hypothesis if the level of significance is less than .05 (Salkind, 2010). For the purpose of this research, the hypotheses were tested at the .05 level of significance. The relationships were measured based on the following standards; institutional commitment, degree commitment, financial strain, collegiate stress, advising, academic integration, social integration, academic motivation, academic efficacy, and Scholastic Conscientiousness.

Table 4.

Summary of Data Analysis Procedures

Research Question	Hypothesis	Independent Variable	Dependent Variable	Statistical Procedure
1	<input type="checkbox"/> H ₀₁	Race <input type="checkbox"/> White <input type="checkbox"/> Minority First Year to College <input type="checkbox"/> First year <input type="checkbox"/> Non-First Year Enrollment <input type="checkbox"/> Enrolled <input type="checkbox"/> Non-Enrolled	Ten CPQ Factors Academic Efficacy Academic Motivation Institutional Commitment Financial Strain Degree Commitment Collegiate Stress Academic Integration Social Integration Advising Effectiveness Scholastic Conscientiousness	MANOVA Multivariate Regression
2	<input type="checkbox"/> H ₀₂	Race <input type="checkbox"/> White <input type="checkbox"/> Minority First Year to College <input type="checkbox"/> First year <input type="checkbox"/> Non-First Year Enrollment <input type="checkbox"/> Enrolled <input type="checkbox"/> Non-Enrolled	Parental Education	Chi-Square

Variables in Study

The independent variables in this study were race (White and Minority), first year to college (first year, non-first year), and enrollment (enrolled, non-enrolled). As the independent variables, they act as the treatment variable that were manipulated or predictor variable (Salkind, 2010, p. 443). The dependent variables in this research were the ten CPQ factors: academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy. As the dependent variables, they act as the predicted or outcome variable (Salkind, 2010, p. 442) and can be examined by regression analysis.

Protection of Study Participants

During each segment of the research, ethical considerations were addressed. To be compliant with the guidelines of Morgan State University's Institutional Review Board, permission was requested to conduct research at three rural Ohio community colleges (known as Community College 1, Community College 2, and Community College 3). A Request for Approval of Human Subjects Research Form was submitted to the university, Spring 2016. The submission of information included material regarding the researcher, the title of the project, the type of research being examined, the type of subjects, and the number of participants in the study. In addition, a brief description of the project and its significance, methods, procedures, and participants was included. When the examination was completed and published, a copy of the researcher's findings was tendered to Morgan State University and College Persistence Questionnaire creator, Dr. William Davidson.

Summary

Chapter 3 describes the methodology and research design for examining the relationship between race and gender, and CPQ persistence factors for Minority and White female rural community college students. The study's research sites, population and sample, and instrumentation are outlined, followed by a description of the independent and dependent variables. Study reliability, validity and participant protection are also addressed. Chapter 3 concludes with a description of the data collection and analysis procedures.

Chapter 4: Data Analysis

Chapter 4 presents the researcher's findings on student persistence based on findings from the College Persistence Questionnaire (CPQ) as it relates to the three independent variables (race, first-year to college, enrollment) for White and Minority female community college students. The ten dependent variables were the scored CPQ factors that predict a student's Academic Efficacy Academic Motivation; Institutional Commitment; Financial Strain; Degree Commitment; Collegiate Stress; Academic Integration; Social Integration; Advising Effectiveness and Scholastic Conscientiousness. Community college student characteristics were classified and summarized using descriptive statistics. The two research questions were answered employing inferential statistics and multivariate regression.

Descriptive Statistics

Demographic Characteristics. The population ($N = 181$) for this study consisted of White female ($n = 128, 71\%$) and Minority female ($n = 53, 29\%$) rural community college students. The average age of White female respondents in this study was 23, while the average age of Minority female respondents was 21. White female respondents were first year students to college (54%), enrolled the current semester for the first time (59%), and did not work (53%). Many non-White (or minority) respondents, on the other hand, were non-first year respondents to college (54%), were not enrolled the current school semester for the first time (56%) and worked more than 30 hours (56%). In addition, many Minority female students reported that their mother had some post-secondary education (29%), while their father was a college graduate (31%). In contrast, many White female respondents stated that their mother (38%) and father (46%) were high school graduates. It should also be noted that some White female respondents stated that their mother had some post-secondary education (37%), which was very close to the percentage of those who reported that their mother was a high school graduate. Furthermore, many of the female respondents were single with no children (White, 81%; Minority, 83%). The three community colleges provide on-campus housing. The research participants (White, 42%; Minority, 72%) lived in a residence hall.

The parents' educational level variables were recoded and reduced to five categories from eight categories on the CPQ. The new categories are: "Less than high school," "High school graduate," "Some post-secondary education," "College graduate and beyond," and "Do not know." Race was also recoded into two categories (down from six categories) to examine specifically White and Minority female students. Using the 2010 US Census Bureau's (ESRI, 2012) definition, Minority students in this study were defined as students who are Hispanic/Latino ($n = 6$, 3%), American Indian or Alaska Native ($n = 2$, 1%), Asian ($n = 6$, 3%), Black or African American ($n = 28$, 16%), Native Hawaiian or Pacific Islander, Two or more race ($n = 8$, 4%), and Other ($n = 4$, 2%). Thus, new parents' educational level and race variables were used in the descriptive and inferential analyses. The findings for the demographic characteristics are presented in Table 5.

Demographic Characteristics of Participants

	White Female Students		Minority Female Students	
Average Age	23		21	
	Frequency	Percent	Frequency	Percent
Population	128	71%	53	29%
First Year to College				
First Year	69	54%	23	44%
Non-First Year	59	46%	29	56%
Total	128	100%	52	100%
Enrollment				
Enrolled	75	59%	24	46%
Not Enrolled	52	41%	28	54%
Total	127	100%	52	100%
Residence				
Residence Hall	54	42%	38	72%
Parent Home	28	22%	4	8%
Relative Home	4	3%	0	0%
House or Apartment Off-Campus	42	33%	11	21%
Total	128	100%	53	100%
Hours Worked				
0 hours	69	54%	23	44%
1 to 10				
11 to 20				
21 to 30	59	46%	29	56%

More than 30				
Total	128	100%	52	100%

Note: There was one Minority participant who did not disclose whether she was first-year, enrolled, and hours worked. One White participant did not disclose if she was enrolled.

Demographic Characteristics of Participants Continued

	White Female Students		Minority Female Students	
	Frequency	Percent	Frequency	Percent
Marital Status				
Married-No Children	6	5%	4	8%
Married-With Children	7	5%	2	4%
Single-No Children	104	81%	44	83%
Single-With Children	11	9%	3	6%
Total	128	100%	53	100%
Mother's education				
Less than High School	8	6%	6	12%
High School Graduate	48	38%	14	27%
Some Post-Secondary Education	47	37%	15	29%
College Graduate and Beyond	22	17%	12	24%
Do Not Know	3	2%	4	8%
Total	128	100%	51	100%
Father's Education				
Less than High School	8	6%	4	8%
High School Graduate	59	46%	8	15%
Some Post-Secondary Education	22	17%	13	25%
College Graduate and Beyond	28	22%	16	31%
Do Not Know	11	9%	11	21%
Total	127	100%	52	100%

Note: Some Minority participants did not disclose their mother's (2) and father's education (1), while one White participant did not disclose if her father's education

Inferential Statistics

RQ1: Are there differences in the ten CPQ factors (academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy) among White and Minority students, first year and non-first year students,

and enrolled and non-enrolled (persisters and non persisters) female students at three rural Ohio community colleges?

Effects of Race (White, Minority), First Year versus Non-First Year, and Enrolled versus Non-Enrolled on the Ten CPQ Factors. Research question one sought to determine if differences existed in the ten CPQ factors among White and minority, *first year and non-first year, and enrolled and non-enrolled* female students at three rural Ohio community colleges. A series of Multivariate Analysis of Variance (MANOVA) tests were conducted to assess separately the effects of independent variables race (White, minority), first year to college (*first year, non-first year*), and enrollment (*enrolled, non-enrolled*) on the ten CPQ factors (dependent variables). Box's *M* tests and Levene's *F* tests of equality of error variance were conducted to test the assumptions of the homogeneity of covariance matrices. The effect size was calculated using partial eta squared (ηp^2) with suggested effect sizes of small (.0099), medium (.0588), and large ([.1379], Richard, 2011).

Race (White, Minority). A nonsignificant Box's *M* test ($p = .404$) indicated that the homogeneity of covariance assumptions was met. A series of Lavene's *F* tests revealed that the assumption of the homogeneity of covariance was justifiable for *Academic Integration* (.130), *Social Integration* (.720), *Degree Commitment* (.506), *Collegiate Stress* (.245), *Advising* (.329), *Scholastic Conscientiousness* (.723), *Institutional Commitment* (.333), and *Academic Motivation* (.938). The assumption of the homogeneity of covariance was not met for *Financial Strain* (.035), and *Academic Efficacy* (.043). Although two of the ten Lavene's *F* tests were statistically significant ($p < .05$), the homogeneity of variance was considered satisfied to proceed with all dependent variables.

A one-way MANOVA revealed a significant multivariate main effects by race (White, Minority), $F(10, 124) = .3057$, *Wilks' Lambda* (λ) = .802, $p < .001$, $\eta p^2 = .198$). The multivariate effect size was estimated at .198, which suggests that 20% of the variance in the dependent variables were accounted for by the independent variable. Power to detect the effect was .977. Thus, the Null hypothesis was rejected. The significant results are presented in Table 6.

Table 6.

	Wilks' λ	<i>F</i>	<i>df</i>	<i>Error df</i>	<i>p</i>	η^2	<i>Observed Power</i>
Race (White, Minority)	.802	3.057	10	124	.002	.198	.977

Given the significance of the overall test, the univariate main effects were examined.

Significant univariate main effects for race were obtained for *Degree Commitment*, $F(1, 133) = 7.204$, $p < .01$, $\eta^2 = .051$, power = .759), *Scholastic Conscientiousness*, $F(1, 133) = 8.723$, $p < .01$, $\eta^2 = .062$, power = .835), and *Institutional Commitment*, $F(1, 133) = 16.712$, $p < .001$, $\eta^2 = .112$, power = .982). For *Degree Commitment*, White female students' mean scores ($M = 8.42$, $SD = 3.151$) were higher than Minority female students' ($M = 2.44$, $SD = 3.330$). For *Scholastic Conscientiousness*, White female students' mean scores ($M = 3.78$, $SD = 3.384$) were also higher than Minority female students' ($M = 1.93$, $SD = 3.198$). Finally, for *Institutional Commitment*, White female students' mean scores ($M = 4.62$, $SD = 3.291$) were higher than Minority female students' ($M = 1.95$, $SD = 3.856$). In total, the results suggest that Minority female students had lower *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment* than White female students. The significant results are presented in Table 7.

Table 7.

	Dependent Variable	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2	<i>Observed Power</i>
Race (White and Minority)	Academic Integration	5.008	1	5.008	3.318	.071	.024	.440
	Financial Strain	.047	1	.047	.003	.957	.000	.050
	Social Integration	.507	1	.507	.018	.892	.000	.052
	Degree Commitment	73.968	1	73.968	7.204	.008	.051	.759
	Collegiate Stress	.713	1	.713	.084	.773	.001	.060
	Advising	.187	1	.187	.016	.901	.000	.052
	Scholastic Conscientiousness	96.749	1	96.749	8.723	.004	.062	.835
	Institutional Commitment	20.824	1	20.824	16.712	.000	.112	.982
	Academic Motivation	6.316	1	6.316	.338	.562	.003	.089
	Academic Efficacy	1.248	1	1.248	.121	.728	.001	.064

First Year versus, Non-First Year. A nonsignificant Box's *M* test ($p = .145$) indicated that the homogeneity of covariance assumptions was met. A series of Lavene's *F* tests revealed that the assumption of the homogeneity of covariance was tenable for *Financial Strain* (.734), *Social Integration* (.577), *Degree Commitment* (.129), *Collegiate Stress* (.061), *Advising* (.084), *Scholastic Conscientiousness* (.990), *Institutional Commitment* (.307), *Academic Motivation* (.409), and *Academic Efficacy* (.978). The assumption of the homogeneity of covariance was not met for *Academic Integration* (.010). Although one of the ten Lavene's *F* tests was statistically significant ($p < .05$), the homogeneity of variance was considered satisfied.

A one-way MANOVA showed no significant multivariate main effect by first year to college (first year versus non-first year), $F(10, 123) = 1.461$, *Wilks' λ* = .894, $p = .162$). Thus, the Null hypothesis was retained. Because of the nonsignificant results, no table was generated.

Enrolled versus Non-Enrolled. A nonsignificant Box's *M* test ($p = .351$) indicated that the homogeneity of covariance assumptions was met. A series of Lavene's *F* tests revealed that the assumption of the homogeneity of covariance was tenable for *Academic Integration* (.245), *Financial Strain* (.505), *Social Integration* (.591), *Degree Commitment* (.461), *Collegiate Stress* (.375), *Advising* (.095), *Scholastic Conscientiousness* (.813), *Institutional Commitment* (.741), *Academic Motivation* (.794), and *Academic Efficacy* (.799).

A one-way MANOVA revealed a significant multivariate main effect by enrolled versus non-enrolled, $F(10, 122) = 2.246$, *Wilks' Lambda* (λ) = .845, $p < .05$, $\eta p^2 = .155$). The multivariate effect size was estimated at .155, which suggests that 16% of the variance in the dependent variables was accounted for by the independent variable. Power to detect the effect was .906. Thus, the Null hypothesis was rejected. The significant results are presented in Table 8.

Table 8.

<i>Multivariate Effects of Enrollment on the Ten CPQ Factors</i>							
	Wilks' λ	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	ηp^2	Observed Power
Enrolled versus Non-Enrolled	.845	2.246	10	122	.019	.155	.906

Given the significance of the overall test, the univariate main effects were examined.

Significant univariate main effects enrolled versus non-enrolled were obtained for *Degree Commitment*, $F(1, 131) = 8.117, p < .01, \eta p^2 = .058, \text{ power} = .807$), *Academic Motivation*, $F(1, 131) = 3.991, p < .05, \eta p^2 = .030, \text{ power} = .509$), and *Academic Efficacy*, $F(1, 131) = 6.634, p < .01, \eta p^2 = .048, \text{ power} = .725$).

For *Degree Commitment*, non-enrolled female students' mean scores ($M = 6.73, SD = 4.009$) were higher than that of enrolled female students' ($M = 5.73, SD = 3.780$). For *Academic Motivation*, non-enrolled female students' mean scores ($M = 3.44, SD = 4.564$) were also higher than that of those who are enrolled ($M = 1.97, SD = 3.938$). Finally, for *Academic Efficacy*, non-enrolled female students' mean scores ($M = 4.32, SD = 3.004$) were higher than that of enrolled female students' ($M = 2.91, SD = 3.252$). Overall, the results suggest that enrolled female students' had lower *Degree Commitment, Academic Motivation, and Academic Efficacy* than that of non-enrolled female students'. The significant results are presented in Table 9.

Table 9.

Significant Univariate Effects of Enrollment on the Ten CPQ Factors

	Dependent Variable	SS	df	MS	F	p	ηp^2	Observed Power
Enrolled versus Non-Enrolled	Academic Integration	33.263	1	33.263	2.198	.141	.017	.313
	Financial Strain	16.321	1	16.321	1.018	.315	.008	.170
	Social Integration	103.304	1	103.304	3.847	.052	.029	.495
	Degree Commitment	82.543	1	82.543	8.117	.005	.058	.807
	Collegiate Stress	2.617	1	2.617	.304	.582	.002	.085
	Advising	2.059	1	2.059	.171	.680	.001	.070
	Scholastic	.201	1	.201	.017	.897	.000	.052
	Conscientiousness							
	Institutional Commitment	1.105	1	1.105	.081	.776	.001	.059
	Academic Motivation	71.945	1	71.945	3.991	.048	.030	.509
Academic Efficacy	65.285	1	65.285	6.634	.011	.048	.725	

Multivariate Regression of Race (White, Minority), First Year versus Non-First Year and Enrolled versus Non-Enrolled and the Ten CPQ Factors. Because of differences found in the previous MANOVA analyses, supplemental analyses, utilizing multivariate linear regressions, were

calculated separately to predict the ten CPQ factors based on race (White, Minority), *first year versus non-first year and enrolled versus non-enrolled*. First year to college variable was recoded, where the non-first year category was coded as 1 and first year category was coded as 2. First enrollment variable was also recoded, where the non-enrolled category was coded as 1 and enrolled category was coded as 2. White female students, first year to college, and enrolled are the reference category.

Race (White, Minority). Significant regression equations were found for *Degree Commitment* $F(1, 133) = 7.204, p < .01, R^2 = .051$), *Scholastic Conscientiousness* $F(1, 133) = 8.723, p < .01, R^2 = .062$), and *Institutional Commitment* $F(1, 133) = 16.712, p < .001, R^2 = .112$) with the predictor variable. The multivariate regression results indicated that race significantly predicted *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment*. The results indicated that Minority female students have statistically significantly lower levels of *Degree Commitment* ($\beta = -1.621, p < .01$), *Scholastic Conscientiousness* ($\beta = -1.854, p < .01$), and *Institutional Commitment* ($\beta = -2.671, p < .001$) than White female students. The multivariate regression results are shown in Table 10.

Table 10.

Significant Multivariate Regression Results of Race and the Ten CPQ Factors

Dependent Variable		β	SE	t	p	95% CI
Degree Commitment	Intercept	8.421	.329	25.615	.000	[7.771, 9.071]
	Minority	-1.621	.604	-2.684	.008	[-2.816, -.426]
Scholastic Conscientiousness	Intercept	3.779	.342	11.060	.000	[3.103, 4.455]
	Minority	-1.854	.628	-2.953	.004	[-3.096, -.612]
Institutional Commitment	Intercept	4.621	.356	12.993	.000	[3.918, 5.325]
	Minority	-2.671	.653	-4.088	.000	[-3.963, -1.379]

Note: The reference category is: White female students.

First Year versus Non-First Year. Significant regression equations were found for *Degree Commitment* $F(1, 132) = 4.444, p < .05, R^2 = .033$) with the predictor variable. The multivariate regression results showed that first year to college significantly predicted *Degree Commitment*. The results indicated that non-first year female students have statistically significantly higher level

of *Degree Commitment* ($\beta = 1.179, p < .01$) than first-year female students. The multivariate regression results are shown in Table 11.

Table 11.

Significant Multivariate Regression Results of First Year to College and the Ten CPQ Factors

Dependent Variable		β	SE	t	p	95% CI
Degree Commitment	Intercept	7.328	.396	18.528	.000	[6.546, 8.111]
	Non-First Year	1.179	.559	2.108	.037	[.073, 2.286]

Note: The reference category is: First year female students.

Enrolled versus Non-Enrolled. Significant regression equations were found for *Degree Commitment* $F(1, 131) = 8.117, p < .01, R^2 = .058$, *Academic Motivation* $F(1, 131) = 3.991, p < .05, R^2 = .030$, and *Academic Efficacy* $F(1, 131) = 6.634, p < .05, R^2 = .048$) with the predictor variable. The multivariate regression results indicated that enrolled versus non-enrolled significantly predicted *Degree Commitment*, *Academic Motivation*, and *Academic Efficacy*. The results found that non-enrolled female students have statistically significantly higher levels of *Degree Commitment* ($\beta = 1.578, p < .01$), *Academic Motivation* ($\beta = 1.473, p < .05$), and *Academic Efficacy* ($\beta = 1.403, p < .05$) than that of enrolled female students. The multivariate regression results are shown in Table 12.

Table 12.

Significant Multivariate Regression Results of Enrollment and the Ten CPQ Factors

Dependent Variable		β	SE	t	p	95% CI
Degree Commitment	Intercept	7.200	.381	18.891	.000	[6.446, 7.954]
	Non-Enrolled	1.578	.554	2.849	.005	[.482, 2.673]
Academic Motivation	Intercept	1.971	.507	3.885	.000	[.968, 2.975]
	Non-Enrolled	1.473	.737	1.998	.048	[.014, 2.932]
Academic Efficacy	Intercept	2.914	.375	7.773	.000	[2.173, 3.656]
	Non-Enrolled	1.403	.545	2.576	.011	[.325, 2.481]

Note: The reference category is: Enrolled female students.

RQ2: What is the relationship between female students' parental education and their demographic characteristics (first year and non-first year, and enrolled and non-enrolled) at three rural Ohio two-year public institutions?

Parental Education and Race (White, Minority). First Year versus Non-First Year and Enrolled versus Non-Enrolled. Research question two sought to assess if any relationship existed in parental education among White and minority, first year and non-first year, and enrolled and non-enrolled female students at three rural Ohio community colleges. Chi-Square tests were conducted separately to compare White and minority, first year and non-first year, and enrolled and non-enrolled female students.

Parental Education and Race (White, Minority). A statistically significant relationship was found between the father's education and race (White, Minority), $\chi^2(4, 180) = 16.614, p < .001$, Cramer's $V = .304$). Examination of the within group column found that 46% of White female students reported that their father was a high school graduate compared to 15% of Minority female students. It was also found that 25% and 31% of Minority female students reported that their father had some postsecondary education and was a college graduate compared to 25% and 22% of White female students, respectively. Eight percent of Minority female students reported that their father had less than a high school education compared to 6% of White female students. Furthermore, 21% of Minority female students reported that they did not know the educational level of their father compared to 9% of White female students. Thus, the Null hypothesis was rejected.

Conversely, no statistically significant relationship was found between mother's education and race (White, Minority), $\chi^2(4, 179) = 6.636, p < .156$. For this, the Null hypothesis was retained. The results are shown in Table 13.

Table 13.

Chi Square Results for the Relationship in Parental Education of White and Minority Female Students

Father's Education	Race	
	White Female	Minority Female
Less than high school	8 (6%)	4 (8%)
High school graduate	59 (46%)	8 (15%)
Some post-secondary education	22 (17%)	13 (25%)

College graduate and beyond	28 (22%)	16 (31%)
Do not know	11 (6%)	11 (21%)
Mother's Education	White Female	Minority Female
Less than high school	8 (6%)	6 (12%)
High school graduate	48 (38%)	14 (28%)
Some post-secondary education	47 (37%)	15 (18%)
College graduate & beyond	22 (17%)	12 (24%)
Do not know	3 (2%)	4 (8%)

Note. Mother's education: $\chi^2(4, 179) = 6.636, p < .156$. Father's education: $\chi^2(4, 180) = 16.614, p < .001$, Cramer's $V = .304$. Column percentages in parenthesis.

Parental Education and First Year versus Non-First Year. No statistically significant relationship was found between mother's education and first year to college (first year, non-first year), $\chi^2(4, 180) = 3.957, p = .412$) and father's education and White and minority, first year versus non-first year, $\chi^2(4, 179) = 4.524, p = .340$). Thus, the Null hypothesis was retained. No tables were generated.

Parental Education and Enrolled versus Non-Enrolled. No statistically significant relationship was found between mother's education and White and enrolled versus non-enrolled, $\chi^2(4, 179) = 5.866, p = .209$) and father's education and enrollment (enrolled, non-enrolled), $\chi^2(4, 178) = 5.024, p = .285$). Thus, the Null hypothesis was retained. No tables were generated.

Summary

The CPQ was used to determine if any differences and relationships existed among female students at three rural Ohio community colleges with the ten CPQ factors and parents' education based on race (White, Minority), whether they were first year to college and enrolled. Descriptive statistics and inferential statistics (MANOVA, Multivariate regression, and Chi-Square) were conducted using SPSS. Descriptive statistics examined the demographic characteristics of White and Minority female students. MANOVA, using *Wilk's Lambda*, was conducted to assess, separately, the effects of race (White, Minority), first year to college (first year, non-first year), and enrollment (enrolled, non-enrolled) on the ten CPQ factors. Box's *M* tests and Levene's *F* tests of

equality of error variance were employed to test the assumptions of the homogeneity of covariance matrices. Multivariate regression and Chi-square were employed to assess the relationships in the ten CPQ factors and parents' education among White and Minority, first year and non-first year, and enrolled and non-enrolled female students. The effect sizes were calculated using partial eta squared (ηp^2) and *Cramer V*.

For research question one, MANOVA results revealed significant main effects of race (White, Minority) on the ten CPQ factors. Given the significance of the overall test, the univariate results found main effects of race on *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment*. The results indicate that Minority female students' *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment* were lower than that of White female students. MANOVA results also indicated significant main effects of enrolled versus non-enrolled on the ten CPQ factors. The univariate results found main effects of enrolled versus non-enrolled on *Degree Commitment*, *Academic Motivation*, and *Academic Efficacy*. The results suggested that female students who were enrolled had lower *Degree Commitment*, *Academic Motivation*, and *Academic Efficacy* than that of female students who were not enrolled. Conversely, MANOVA results found no significant multivariate main effect of first year to college (first year versus non-first year) on the ten CPQ factors.

The supplemental Multivariate regression results indicated that race significantly predicted *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment*. The results suggested that Minority female students had lower *Degree Commitment*, *Scholastic Conscientiousness*, and *Institutional Commitment* than White female students. Multivariate regression results also found that first year to college significantly predicted *Degree Commitment*. The results suggested that non-first year female students had statistically significantly higher *Degree Commitment* than White female students. Multivariate regression results further found that enrolled versus non-enrolled significantly predicted *Degree Commitment*, *Academic Motivation*, and *Academic Efficacy*. The results suggested that non-enrolled female students had higher *Degree Commitment*, *Academic Motivation*, and *Academic Efficacy* than that of enrolled female students.

Research question two Chi-Square results indicated a statistically significant association between the father's education and race (White, Minority). The results suggested that majority of the White female students in this study reported that their father was a high school graduate. Also found was that most Minority female students reported that their father had some postsecondary education and was a college graduate. A low percentage of White (6%) and Minority (8%) female students reported that their father had less than a high school education. Furthermore, a small percentage of White (6%) and Minority (21%) female students reported not knowing their father's educational level. Conversely, there was no statistically significant association relationship found between mother's education and race (White, Minority), between parents' education and first-year versus non-first year, or between parents' education and enrolled versus not enrolled. Chapter 5 will provide a discussion of the findings, conclusions, and recommendations for best practices and future research.

Chapter 5: Discussion, Conclusion, Implications, and Recommendations

For Chapter 5, the researcher summarized the study and analyzed the results. The sections in this chapter are the introduction, findings, discussion of the study, theoretical framework, limitations, and recommendations. The summary section provides the background elements of this research. The limitations section of this study includes an explanation of the structure for the research study. Also, included are recommendations for future research and practice in rural community colleges.

Theoretical Discussion

The purpose of this quantitative study was to examine persistence factors of Minority and White female students at three Ohio rural community colleges. The study also examined the demographic characteristics of female Ohio rural community college students. The CPQ is an instrument developed by researchers Davidson et al. (2009). The intent is to provide institutional administrators a means to identify at-risk students, why they are likely to drop out, and examine 10 CPQ factors between persisters and non-persisters (Davidson et al., 2009).

By administering the College Persistence Questionnaire (CPQ) and analyzing the results, the researcher discovered relationships between the research participants and the CPQ factors affecting persistence. Terenzini and Reason (2005) examined the unusual link between persistence and the proposed framework "indicating student persistence research is a multi-institutional assignment; enhancing student persistence is local" (Terenzini & Reason, 2005, p. 678). For this research project, these ideas are drawn from the literature collected by Davidson et al. (2009) regarding the students' background experiences and 10 CPQ factors (academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy), and the student learning and persistence model of Terenzini and Reason.

The theoretical framework of Terenzini and Reason (2009) included four benchmarks that impact student results: Student pre-college characteristics and experiences, organizational context, student/peer environment, and individual student experiences. These four benchmarks

supported the Davidson, et al. (2009) college persistence categories by examining students in a comprehensive approach, starting with the students and their individual student experiences. The framework detailed the relationships of students, faculty, and institutional influences that impact college success. Lastly, the benchmarks provided guidance and examined the importance of student persistence.

For example, Minority female students have a statistically lower level of Degree Commitment, Scholastic Conscientiousness and Institutional Commitment. Non-first-year to college significantly predicted Degree Commitment. In addition, non-enrolled female students have statistically significant higher levels of Degree Commitment, Academic Motivation, and Academic Efficacy. The research study also indicated a statistically significant association between the father's education and race (White, Minority).

The model postulates that some fact (or truth) must exist regarding a student's academic, personal and social attributes, and backgrounds (Reason, 2009, p. 662). The objective of student persistence research is an inquiry to seek and understand "multiple concentric environments they inhabit, recognizing that different students engage differently within those environments" (Reason, 2009, p. 662).

The study provides insight into the significance of persistence between White and Minority female students at three rural Ohio community colleges. In some instances, the hypothesis findings determined that we accepted the alternative hypothesis by rejecting the null hypothesis. While other findings were consistent with the research findings, the hypothesis was retained for a lack of statistical evidence. The following were the research questions that guided this study.

Research Questions

RQ1: Is there a statistically significant difference in the ten CPQ factors (academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy) among White and non-White, minority, first year

and non-first year, and enrolled and non-enrolled female students at three rural Ohio community colleges?

RQ2: What is the relationship between female students' parental education and their demographic characteristics (White and Minority, first year and non-first year, and enrolled and non-enrolled) at three rural Ohio two-year public institutions?

Discussion of Findings

Effects of Race (White, minority) on and Predictor of the Ten CPQ Factors. The absence of support services in the areas of student goals and student support seem to have caused Minority community college students to stop-out or drop out of their institutions of higher learning. According to Strayhorn and Johnson (2014), "although these students withdraw under their own free will, the deficiencies of social integration and academic achievement often leave the Minority student disenfranchised with their college experience" (p. 3).

Strayhorn and Johnson's (2014) study found the following:

It may be the case that younger Black women encounter academic or social challenges (e.g., use of technology, faculty perceptions, role conflict) that negatively influence their overall evaluation of community college. On the other hand, this finding may reflect the impact of detractors or external commitments such as work duties, family responsibilities, children and other dependents, financial worries, and even health concerns on Black women's educational experiences at community colleges. (p. 12).

The research analysis predicted that there was a statistically significant relationship in the ten CPQ factors among White and Minority female students. Minority female students had a significantly lower degree commitment, Scholastic Conscientiousness and institutional commitment. Community colleges act as the first responders who triage a diverse student population.

According to Wapole, Chambers, and Goss (2014), the community college population consists of Minority and female students who face barriers persisting to degree completion (pp. 155-156). Despite their goals, many community college students are unable to complete a vocational certificate, associate degree, or transfer due to challenges arising over their course of

study (Alfonso, 2006; Boswell & Wilson, 2004; Bragg & Durham, 2012; Coley, 2000; Goldrick-Rab, 2010; Hagedorn, Moon, Cypers, Maxwell, & Lester, 2006; Rifkin, 1998; Townsend & Wilson, 2006). A myriad of attributes such as academics, employment, financial strain, and family matters impede this underprepared segment of the community college (Walpole, Chambers & Goss, 2014, pp. 155-156).

According to Strayhorn (2012), acceptance or feeling a part of something, is belonging. This innate expression leads to “positive and/or prosocial outcomes such as engagement, achievement, wellbeing, happiness and optimal functioning” (p. 22). Johnson (2013) asserts, a legacy system that paves the way for standards is already etched in campus environments that influence marginalized students from belonging. And more emphasis should be placed on the systemized practices of dominant social groups, classism, sexism and racism that impact student experiences (p. 663).

Castellanos et al. (2016) explain high impact practices in the form of faculty mentoring can help students adjust to campus culture, aid with growth and development emotionally, socially, intellectually and in the labor market, plus increase recognition and achievement. It is developing and cultivating mentoring relationships that can provide effective interactions, influences on student outcomes and educational improvements. Mentoring equips students to flourish academically despite their environmental surroundings. Loyalty, communication and trust must first start with collaborative relationships among administrators, faculty and staff who can transfer their knowledge and experiences to first-year students new to the learning community of higher education and provide enough support to non-first year students who are struggling (p. 83).

Effects of First-Year to College (First Year, Non-First Year) on and Predictor of the Ten CPQ Factors. Statistically significant differences were found among first-year and non-first year research participants and the ten CPQ factors. D’Lima et al. (2014) share previous studies, indicate regardless of ethnicity and/or gender students adopt a performance approach, which for some increase over the semester. Thus, the motivation to persist and fulfill mastery orientation

goals regardless of college enrollment status (i.e. first-year, non-first year) is equal among them (D'Lima, Winsler, & Katsinas, 2014, p. 352).

The research findings indicated a statistically significant relationship among the ten CPQ factors among first year and non-first year female students and degree commitment. Non-first year female White and Minority students were more committed to degree completion than first year students. Community college students are known to enroll at their local community college for various reasons. Whether it is for professional development to earn a program certificate, associate's degree or as a transfer student, the reasons are many. The student's goals may not align with the institution or government goals and policies created. This misalignment would give the appearance that the community college mission is deficient in the areas of student retention and achievement goals.

Martin, Galentino and Townsend (2014) suggested that a student's success is driven from his or her own motivation and self-empowerment. The traits are developed through the student's experiences and values aligned with cultural capital, college plans and academic preparedness (pp. 224-226). Barbatis (2010) states, "modeled cultural capital influences persistence through cultural and racial self-identification and supportive families" (p. 224). College students who are informed and knowledgeable about federal financial aid and the enrollment process persist more than those students who are uninformed. Being informed helps close the divide between persisters and non-persisters. According to Bowen (2006), college coaching is necessary when helping underprepared college students with their academic goals and self-confidence (p. 241).

Community college students often need remedial coursework, experience poverty and lack the skill set necessary to succeed. These factors can hinder a student's persistence from year one, to year two, and year three. As Braxton et al. (2004) exert, "it's the community college student's entry characteristics that directly affect persistence, but additional work is needed to determine persistence" (Martin, Galentino, & Townsend, 2014, p. 226).

Effects of Enrollment (Enrolled, Non-Enrolled) on and Predictor of the Ten CPQ Factors.

The Center for Community College Student Engagement (CCCSE, 2013) advocates that high

impact practices in the form of student success courses; academic goal setting and planning, along with student alert and intervention practices are significant. CCCSE reports the “Houston Community College System (HCCS) requires all students enrolling with 0-12 credits enroll in their college success course” (p. 17). HCCS teaches life and job readiness skills, which have improved student persistence. At Zane State College, faculty, staff, and students partnered to create Finding Inspiration Together (FIT). According to Zane State, “they yielded a 10% increase in retention by identifying that the college student relationship begins at the first point of contact and not the first day of class” (p. 9). The Northeast Alabama Community College leadership implemented an early alert and intervention process by pinpointing students who are experiencing academic and attendance difficulties. According to CCCSE, “by doing so, the administration and faculty provided wrap around services in the areas of support and tutoring” (CCCSE, 2013, pp. 33). Therefore, if community colleges engage in low-impact practices, they should anticipate low student engagement and student outcomes. The lack of student motivation could be caused by the absence of high impact practices within their college.

According to Byun, Meece and Irvin (2012), persisting to degree completion for college students is complicated. Distinctive characteristics that impact degree completion are a) educational values; b) resources; and c) the role of the community. In rural communities, the goal of obtaining a degree is unhurried. A college degree is not viewed as an added value in some rural communities. Because of their desire for college students to stay in the rural community, outmigration is a concern. The lack of economic capital impacts rural community college students when enrolling in college and moving towards degree completion. “Because of poverty found in rural communities, students face a scarcity of resources that make educational attainment difficult” (Byun, Meece & Irvin, 2012, pp.412-437). Social capital may have a pivotal role in the rural students’ success. Rural communities are tribal in nature and believe in loyalty to those in their social group. However, traditional views suggest that a lack of motivation and perceived rejection by the rural community are what truly impacts degree completion.

Relationship of Race (White, minority), First Year to College, and Enrollment and Parental Education. There is a relationship in parental educational attainment in the research

study. The research indicates that the father's educational attainment played a role in the continuing generation student's achievement goals to persist. According to Schmitt-Wilson et al. (2018), "rural students who are certificate or degree seeking are positively impacted by family income, father's education and grade point average" (p. 6). A father's academic influence helps continuing-generation students navigate college life and persist. The findings disclose the research participant's mother's educational attainment was not statistically significant.

In 2012, Westbrook and Scott, explained "parents see themselves as secondary influences in their child's academic achievement. However, Minority groups benefit even more when parental influence shapes the student's multiculturalism and social stratification paradigm. Regardless of ethnicity, parents believe academic ownership and accountability to degree completion are the responsibility of the student and institution" (pp. 3-4).

The findings in this study also found no statistically significant association in parental education and college persistence among first year and non-first year female students at three rural Ohio community colleges. Often, college students are driven by their own self-determination and goals. It is helpful for students to receive encouragement, support and mentoring from family, friends and educators.

Moreover, parental educational attainment did not have a statistically significant association on the outcomes of academic persistence between research participants. Other attributes such as degree commitment, institutional commitment, academic motivation and Scholastic Conscientiousness played a greater role impacting the student's decisions and experiences. However, it must be understood the lack of parental educational attainment does not imply there is lack of educational parental value or affect. According to Walsh and Robinson-Kurpius (2016), parents who value education by supporting and encouraging their children demonstrate a positive trait. Therefore, their parents' support and educational decisions impact persistence (p. 62).

Alignment of Findings to Theoretical Framework (2009)

Terenzini and Reason's (2009) theoretical framework provided guidance for this research study. The authors Terenzini and Reason posited that, "there is an array of influences that impact

student outcomes” to persist to degree completion (p. 662). The four components of the researchers’ framework are characterized by a) pre-college characteristics/experiences; b) organizational context; c) student peer environment and d) individual student experience. The researcher examined the independent variables of race, first-year to college, enrollment and their relationship to the CPQ dependent variables based on research question one. All ten CPQ factors play a role in persistence. However, for the research findings and discussion of this study, the focus is on the factors that reoccur throughout the research study and are significant. Research question two examined parental education and its impact on student persistence.

The significance of degree commitment is linked to the theoretical framework according to Terenzini and Reason (2009) because “students begin college with a caveat of social, personal, academic and background experiences that influence their behaviors, attitudes and decisions to persist” (Terenzini & Reason, 2009, p.662). Therefore, students are ready and able to varying degrees to enroll in college with the intention of degree completion by engaging and committing to their academic goals.

The significance of scholastic conscientiousness is linked to the theoretical framework because of the student’s disposition or pre-college experiences. Tross et al. (2000) explained, direct and indirect relationships exist between first to second year persistence and the student’s ability to complete tasks (Terenzini & Reason, 2009, p.665).

Institutional commitment showed significance and is linked to the theoretical framework. The college environment they experience impacts a students’ school choice and loyalty—therefore, influencing their development and success to degree completion. Traits in the manner of support, school size, and culture are factors that students often consider during their academic journey to persist (Terenzini & Reason, 2009, p. 666).

Academic motivation showed significance and linked to the theoretical framework. Terenzini and Reason describe that “a student’s social and personal dispositions along with their experiences in the following areas of achievement motivation, career goals, personal and academic to persist” (Terenzini & Reason, 2009, p. 662).

The significance of academic efficacy is linked to the theoretical framework. Researchers have determined the more academically prepared a student is the more a student will persist and overcome any deficiency in their background. However, this is not the case for those with low academic preparation and socioeconomic status and backgrounds. They most likely will not persist to degree completion (Terenzini & Reason, 2009, pp. 664-665).

Parental education for this research study showed statistical significance linked a father's education among minority female students and persistence. Researchers have indicated that there is a relationship between parental education and persistence amongst their children. Even more, they have argued for more family involvement to support students of color (Terenzini & Reason, 2009, p.664).

Lastly, research is lacking pertaining to the rural community college and its role and impact on student persistence. The participants of this study were bright, eager and willing to learn, but need support systems in place to assist them until degree completion. Their success and/or failures empower the democratic gateway of the community college landscape and its importance.

Limitations

The research study findings contribute to the body of work pertaining to persistence and rural community colleges. Cone and Foster (2006) state, when utilizing the quantitative research methodology, the results provide a statistical analysis of validity and measurement. In doing so, limitations generally emerge in the research study design or problem (Cone & Foster, 2011, pp. 84-86).

The following limitations of the study include the college environment, lack of resources and limited outcomes. Rural community colleges have experienced a decrease in enrollment over the past seven years. This decrease impacted the sample size. Extending the research to additional rural colleges and including male students in the research would enlarge the sample size. The environment and conditions of each college are different. Each college takes on its own campus persona. Therefore, the CPQ results collected fall 2017 semester, might yield different results in spring 2018 and thereafter. Lastly, limited outcomes due to minimal responses on the

Likert scale restricted participants from providing additional information that may have been valuable to the research study and their experiences to persist. Therefore, college administrators, faculty, and advisors should exercise caution when postulating the outcomes

Recommendations for Best Practices

- Plan, develop, and implement an Office of Student Diversity & Inclusion or Minority Affairs and Black Student Union;
- Implement high impact activities based on CCCSE findings;
- Expand retention programs exclusively for Minority women and cultural congruity;
- Research or create parental collaboration programs to advance student support systems;
- Integrate social capital; partner with community organizations and businesses to discuss local two-year institutions goals and future of rural community.

Recommendations for Future Research

- An exploratory investigation using a qualitative approach to examine White and Minority female student persistence at rural community colleges may provide a deeper understanding of the female experience to degree completion by conducting participant observations, focus groups and interviews;
- A quantitative research examination may reveal persistence factors between first-year, Minority male students and White male students at three Ohio rural community colleges;
- An expansion of the research should include an examination among female, male and or both male and female urban, suburban and rural community colleges as it pertains to first-year and non-first year persistence and degree completion;
- An annual summit on social capital, outmigration and their impact on the rural community and higher education would provide meaningful outcomes;

- An inquiry of 21st century perception of student persistence through the lens of rural community college administrators, faculty, and staff may be insightful.

Conclusion

In 2018, the pathway to degree completion still hinges on the student's motivation to persist. However, cultural, societal and institutional characteristics and practices are weaved in the portrait of barriers that plague the outcomes of student success. As 2020 approaches, history will be the judge of the completion agenda goals under the administration of former United States President Barack Obama.

The CPQ provided an in-depth study of 10 factors (i.e. academic integration, financial stress, social integration, degree commitment, collegiate stress, advising, Scholastic Conscientiousness, institutional commitment, academic motivation, and academic efficacy) that determine if White and Minority, first-year, non-first year and first semester, and non-first semester female students in rural Ohio two-year public institutions persist. Community colleges are known as the gateway of democracy. There is a remnant of women, minorities, and rural students in community colleges seeking democracy. This author contends the invisible can be invisible no more. Future entrepreneurs, chief executive officers, technology gurus, nurses, engineers, horticulturalist, teachers and human services and mental health professionals deserve the opportunity to persist and achieve their academic goals like their urban and suburban peers with programming, funding and support.

Without the inclusivity of the rural college and its students, the gateway of democracy is weakened. The ability to provide equality in education to all is the thread that connects the gateway to democracy for rural students and rural institutions. Together we can look through the therapeutic lens to offer wrap around educational services and support to the rural community, so their communities can thrive. As we have entered *the year of the woman*, will the community college be willing to give the rural female students the opportunity to persist and become productive students contributing to the well-being of society?

References

- Alberti, R. E., & Emmons, M. L. (1970). *Your perfect right: A guide to assertive behavior*. San Luis Obispo, CA: Impact.
- American Association of Community Colleges (2011). *The college completion challenge fact sheet*. Retrieved from http://www.aacc.nche.edu/About/completionchallenge/Documents/Completion_Toolkit_Complete.pdf
- American Association of Community Colleges (2013). *The college completion challenge fact sheet*. Retrieved from http://www.aacc.nche.edu/About/completionchallenge/Documents/Completion_Toolkit_Complete.pdf
- American Community Survey (2009). Retrieved from https://www.census.gov/newsroom/releases/archives/american_community_survey_acs/cb10-cn78.html
- Arnold, M. L., Biscoe, B., Farmer, T. W., Robertson, D. L., & Shapley, K. L. (2007). *How the government defines rural has implications for education policies and practices* (Issues & Answers Report, REL 2007–No. 010). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529.
- Bailey, Thomas R. (2006). *Research on institution level practice for postsecondary student success*. Washington, DC: National Symposium on Postsecondary Student Success.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55, 485-54.

- Beck, H., & Davidson, W. (2009). *The College Persistence Questionnaire: Esperanza University Institutional Commitment Report*, (4-5).
<https://www.beckdavidson.com/welcome/EsperanzaCreport2009.pdf>
- Boswell, K., Palmer, J. C., & Pierce, D. (2006). *Stakeholder attitudes and perceptions, Ohio bridges to opportunity initiative*. Cincinnati: Knowledge Works Foundation.
- Burns (2010). At Issue. Community college variables: A review of the literature. *The Community College*, 16(2), 33-61.
- Byun, S., Meece, J. L., & Irvin, M. J. (2012). Rural-Nonrural Disparities in Postsecondary Educational Attainment Revisited. *American Educational Research Journal*, 49(3), 10.3102/0002831211416344.
<http://doi.org/10.3102/0002831211416344>
- Cassell, W., & Daggett, W. R. (2010 January). *Peer learner engagement: Enhancing the promise of school improvement*. International Center for Leadership Education. Retrieved from <http://www.leadered.com/pdf/Peer Learning White paper.pdf>
- Castellanos, J., Gloria, A. M., Besson, D., & Harvey, L. O. C. (2016). Mentoring Matters: Racial Ethnic Minority Undergraduates' Cultural Fit, Mentorship, and College and Life Satisfaction. *Journal of College Reading and Learning*, 46(2), 81-98.
- Center for Community College Student Engagement. (2013). *A Matter of Degrees: Engaging Practices, Engaging Students (High-Impact Practices for Community College Student Engagement)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Center for Community College Student Engagement. (2014). *Focus on student engagement*. Retrieved from <http://www.ccsse.org/aboutccsse/aboutccsse.cfm>
- Cohen, A. M., & Braver, F. B. (2008). *The American community college*. (5th ed.). San Francisco: Jossey-Bass.

- Community College Survey of Student Engagement (CCSSE), (2007). Committing to Student Engagement. Reflections of CCSSE'S First Five Years. Retrieved from https://www.ccsse.org/center/resources/docs/publications/2007_National_Report.pdf
- Cone, J. D., & Foster, S. F. (2006). *Dissertations and theses from start to finish: Psychology and related fields*. Washington, DC: American Psychological Association.
- Copeland, M., Tietjen-Smith, T. A., Waller, L. R., & Waller, S. K. (2008). Urban versus rural: Part-time enrollment. *The Community College Enterprise*, 14(1), 67-78.
- Cornell, R., & Mosley, M. L. (2006). Intertwining college with real life: The community college first-year experience. *Peer Review*, 8(3), 23-25.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Creswell, J. W. (2009). *Research design qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Davidson, W. B., Beck, H., & Milligan, M. (2009). The college persistence questionnaire: Development and validation of an instrument that predicts student attrition. *Journal of College Student Development*, 50, 373-39. doi:1.1353/csd..0079
- D'Lima, G.M., Winsler, A., & Kitsantas, A. (2014). Ethnic and Gender Differences in First-Year College Students' Goal Orientation, Self-Efficacy, and Extrinsic and Intrinsic Motivation. *The Journal of Educational Research*, 107(5), 341-356, DOI: 10.1080/00220671.2013.823366
- Dougherty, K. J., Marshall, J., & Soonachan, A. (2006). *Achieving the dream in Ohio: State policies affecting access to, and success in, community colleges for students of color and low-income students*. New York: Columbia University, Teachers College, Community College Research Center.
- Education Commission of the States (2004). Retrieved from http://www.ecs.org/ecsmain.asp?page=/html/publications/home_publications.asp

- Environmental Systems Research Institute (2012). *Minority population growth-The new boom: An analysis of America's changing demographics*. Retrieved from <http://www.esri.com/library/brochures/pdfs/minority-population-growth.pdf>2012
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction*. Boston: Pearson Education, Inc.
- Goldrick-Rab, S. (2007). *Promoting academic momentum at community colleges: Challenges and opportunities*. New York: Columbia University, Teachers College, Community College Research Center.
- Hagedorn, L. S. (2004, April). *Speaking community college. A glossary of appropriate terms*. Paper presented at the meeting of Council for the Study of Community Colleges (CSCC), Minneapolis, MN.
- Hardy, D. E., & Katsinas, S. G. (2007). Classifying community colleges: How rural community colleges fit. In P. L. Eddy & J. P. Murray (Eds.), *Rural community colleges: Teaching, learning, and leading in the heartland: New directions for community colleges*, No. 137, 5-17, San Francisco, CA: Jossey-Bass.
- Harper, S. R., & Quaye, S. J. (2009). Beyond sameness, with engagement and outcomes for all: An introduction. In S. Harper, & J. Quaye (Eds.), *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations*. (pp. 1-15). New York: Routledge
- Harvey-Smith, A. B. (2002). *An examination of the retention literature and application in student success*. Retrieved from <http://www.ccsse.org/publications/harvey-smith.pdf>
- Hillman, N. W. (2016). Geography of college opportunity: The case of education deserts. *American Educational Research Journal*, 53(4), 987-1021. doi:10.3102/0002831216653204
- Hirose-Wong, (1999). *Gateways to democracy: Six urban community college systems*. Los Angeles, CA: ERIC Clearinghouse for Community Colleges. (ERIC Document Reproduction Service No. ED438873).
- Integrated Postsecondary Educational Data System. (2007). *Identification of rural locales*. Retrieved from http://nces.ed.gov/ccd/Rural_Locales.asp

- Integrated Postsecondary Educational Data System. (2014). *Compare individual Institutions 2001-2013*. Retrieved from <http://nces.ed.gov/ipeds/datacenter/MasterVariableList.aspx?changeStep=YES&stepId=2>
- Jensen, J. (2003). The influence of the rural community college initiative on increasing civic capacity in distressed rural communities. *Community College Review, 21*(3), 24-39.
- Johnson, D. R. (2013). College Students' Sense of Belonging: A key to Educational Success for All Students by Terrell L. Strayhorn. *Journal of College Student Development, 54*(6), 662-663. doi: 10.1353/csd.2013.0088
- Johnson, J., Showalter, D., Klein, R., & Lester, C. (2014). *Why rural matters 2013-2014: The condition of rural education in the 50 states*. Washington, DC: Rural School and Community Trust.
- Katsinas, S. G., U.S. Department of Education, (2010). *America's rural community college demographics, challenges and opportunities: A briefing on rural community colleges for the U.S. Department of Education, Tuscaloosa, Alabama: The Education Policy Center University of Alabama*.
- Killackey, J., & Valadez, J. R. (1995). *Portrait of the rural community college: New directions for community colleges*. No. 90, San Francisco, CA: Jossey-Bass.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- Kuh, G. D. (2003). What we're learning about student engagement from NSSE. *Change, 35*(2), 24-32.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year student grades and persistence. *The Journal of Higher Education, 79*(5), 540-563. Retrieved from http://rhartshorne.com/fall-2002/eme6507-rh/cdisturco/eme6507-eportfolio/documents/kuh_cruce_shoup_gonyea.pdf
- Lindheimer, J. B., III. (2011). *The College Persistence Questionnaire: Developing scales to assess student retention and institutional effectiveness*. Unpublished master's thesis. Appalachian State University, Boone, NC.

- Martin, K., Galentino, R., & Townsend, L. (2014). Community college student success: The role of motivation and self-empowerment. *Community College Review*, 42(3), 221-241. Retrieved from <http://webproxy3.columbuslibrary.org/login?url=https://search-proquest-com.webproxy3.columbuslibrary.org/docview/1543467007?accountid=1060>
- Maxwell, W., & Shammas, D. (2007). Research on race and ethnic relations among community college students. *Community College Review*, 34(4), 344-361.
- Mertes, S. J., & Hoover, R. E. (2014). Predictors of first-year retention in a community college. *Community College Journal of Research and Practice*, 38(7), 651-660. doi:10.1080/10668926.2012.711143
- Miller, M. T., & Tuttle, C. C. (2006). Rural community colleges developing perceptions of self-identity. *The Community College Enterprise*, 12(2), 55-68.
- Mortenson, T. G. (2005). Measurement of persistence. In A. Seidman (Ed.) *College student retention*. (pp. 31-60). Westport, CT: Praeger.
- Museus, S. D. & Quaye, S. J. (2009). Toward an intercultural perspective of racial and ethnic minority college student persistence. *The Review of Higher Education*, 33(1), 67-94. Retrieved from http://muse.jhu.edu/journals/review_of_higher_education/v033/33.1.museus.pdf
- National Survey of Student Engagement (NSSE). Retrieved from <http://nsse.indiana.edu/pdf/Benchmarks%20to%20Indicators.pdf>
- Ohio Board of Regents (2006). *The performance report for Ohio's colleges and universities, 2005 institutional outcomes measures*. Retrieved from http://regents.ohio.gov/perfrpt/2006/Performance_Report_2006_final.pdf
- Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Pike, G. & Kuh, G. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46(2), 185-209.

- Planty, M., Hussar, W., Snyder, T., Provasnik, S., Kena, G., Dinkes, R., KewalRamani, A., & Kemp, J. (2008). *The condition of education 2008* (NCES 2008-031). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, D.C.
- Porter, S. R. (2004). Understanding retention outcomes: Using multiple data sources to distinguish between dropouts, stopouts, and transfer-outs. *Journal of College Student Retention*, 5(1), 53-7.
- Rayle, A., & Chung, K. Y. (2007-2008). Revisiting first-year college students' mattering: Social support, academic stress, and the mattering experience. *Journal of College Student Retention*, 9(1), 21-37.
- Reason, R. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), 659-682.
Retrieved July 6, 2015, from
[http://www.sjsu.edu/studentaffairs/docs/StudentPersistence.ReasonJournal article.pfg](http://www.sjsu.edu/studentaffairs/docs/StudentPersistence.ReasonJournal%20article.pfg)
- Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher Education: Gaps in access and persistence study* (NCES 2012-046). U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: Government Printing Office.
- Rural Community College Alliance. (2013). *Fast facts*. Retrieved from
http://www.ruralccalliance.org/66.147.244.110/~ruralcca/temp/66.147.244.110/~ruralcca/temp/?page_id=28
- Rural Community College Alliance. (2016). *Why rural community and tribal colleges matter*. Holdenville, OK: Author.
- Salkind, N. (2010). *Statistics for people who think they hate statistics* (2nd ed.). Thousand Oaks, CA: Sage.
- Sand, J. K., Robinson Kurpius, S. E., & Dixon Rayle, A. (2005). *Academic stress and social support factors in Latino and Euro-American male and female college students*. Manuscript submitted for publication.

- Schmitt-Wilson, S., Downey, J., & Beck, A.E. (2018). Rural educational attainment: The importance of Context. *Journal of Research in Rural Education*, 33(1), 1-14.
- Seidman, A. (2005). *Minority student retention: Resources for practitioners*. Retrieved from <http://www.cscsr.org/docs/MinorityStudentRetentionResourcesforPractitioners2006.pdf>
- Shamah, D. (2010). *The long road to college from rural America*. Retrieved from <http://www.education.com/reference/article/long-road-college-rural-america/>
- Smith, R. L. (2005). *Challenges facing rural community colleges*. Rural community college alliance creating opportunities in place.
- Starcher, S. (2005). *The triracial experience in a poor Appalachian community: How social identity shapes the school lives of rural minorities*. (Electronic Thesis or Dissertation). Retrieved from <https://etd.ohiolink.edu/>
- Starks, G. D. (1989, March). *Perceptions of writing by exceptional cases of adult returning women in a rural college: Differences between persisters and leavers*. Annual meeting of the American educational research association, San Francisco, CA.
- Strayhorn, T. L., & Johnson, R. M. (2014). Black Female Community College Students Satisfaction: A National Regression Analysis. *Community College Journal of Research and Practice*, 38(6), 534-550. doi:10.1080/10668926.2013.866060
- Steinmann, T. D., Miller, M. T., & Pope, M. L. (2004). How female community college students deal with academic challenges. *The Community College Enterprise*, 10(1), 51-61.
- Terenzini, P. T., & Reason, R. D. (2005). Parsing the first year of college: A conceptual framework for studying college impacts. In *Annual meeting of the association for the study of higher education*.
- The Agriculture Act of 2014, 113-79, H.R. 2642, 7 U.S.C. §§ 8702 (2014).
- The College Board (2016). *Campus Setting: Rural, Suburban, Urban Which is Right for You?* Retrieved from <https://bigfuture.collegeboard.org/find-colleges/how-to-find-your-college-fit/campus-setting-rural-suburban-urban>

- The Community College Completion Corps (2010). Student guide. Retrieved
<http://www.cccompletioncorps.org/ccccorps/sites/default/files/pdfs/student-guide-low-res.pdf>
- The White House, Office of the Press Secretary. (2009). Excerpts of the President's remarks in Warren, Michigan and fact sheet on the American graduation initiative administration [Press release]. Retrieved from <https://www.Whitehouse.gov/the-press#NAME?xcerpts-presidents-remarks-warren-michigan-and-fact-sheet-american-graduation-init>
- Tinto, V. (1988). Stage of student departure: Reflections of longitudinal character of student leaving. *The Journal of Higher Education*, 59(4), 438-455. Retrieved from <http://www.jstor.org/stable/198192>.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: Chicago Press.
- Tinto, V. (2002). *Enhancing student persistence: Connecting the dots*. Retrieved from http://nsse.iub.edu/pdf/connecting_the_dots_report.pdf
- Tinto, V. (2006). Research and practice of student retention: What's next? *Journal of College Student Retention: Research, Theory and Practice*, 8(1), 1-19.
- Tinto, V. (2006–2007). Research and practice of student retention: What's next? *Journal of College Student Retention: Research, Theory & Practice*, 8(1), 1–19.
- U.S. Census Bureau. (2012). Retrieved from <http://www.census.gov/data/2012>
- U.S. Department of Education. National Center for Education Statistics. *Stopouts or stayouts? Undergraduates who leave college in their first year*. NCES 1999-087, by Laura Horn. Project Officer: Dennis Carroll.
- United States Department of Agriculture. (2017). *Rural Education At A Glance, 2017 Edition*. Retrieved from <https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf?v=0>
- United States Department of Education. *College affordability and completion: Ensuring a pathway to opportunity*. Retrieved February 24, 2016 from <http://www.ed.gov/college>

- University System of Ohio Board of Regents. (2011). *Underrepresented Ohioans need more education to meet the state's workforce needs*. Retrieved from <https://www.owens.edu/ie/ConditionReport-4.pdf>
- Valadez, J. R. (1996). Educational access and social mobility in a rural community college. *Review of Higher Education, 19*(4), 391-409.
- Walker, C. (2008). *Working with college students and student development theory primer*. Retrieved from <http://uncw.edu/studentaffairs/pdc/documents/StudentDevelopmentTheorybyM.Walker.pdf>
- Walpole, M., Chambers, C. R., & Goss, K. (2014). Race, Class, Gender and Community College Persistence Among African American Women. *NASPA Journal about Women in Higher Education, 7*(2) 153-176. doi: 10
- Walsh, K.J., & Robinson-Kurpius, S.E. (2016). *Parental, Residential, and Self-Belief Factors Influencing Academic Persistence Decisions of College Freshmen*. *Journal of College Student Retention: Research, Theory & Practice Vol. 18*(1) 49–67.
- Westbrook, S. B., & Scott, J. A. (2012). The Influence of Parents on the Persistence Decisions of First-Generation College Students. *Focus on Colleges, Universities, and Schools, 6*(1), 1-9.
- Williams, J. E., & Luo, M. (2010). Understanding first-year persistence at a micropolitan university: Do geographic characteristics of students' home city matter? *College Student Journal, 44*(2), 362-376.
- Winkle-Wagner, R. L. (2009). *The unchosen me-race, gender, and identity among Black women in college*. Baltimore, MD: The Johns Hopkins University Press.
- Yoshioka, M. (2000). Substantive differences in the assertiveness of low-income Black, Hispanic, and Caucasian women. *The Journal of Psychology, 134*(3), 243-259.

Appendix:
College Persistence Questionnaire Student Information Form, Version
2.0 See page 78

College Persistence Questionnaire Student Information Form, Version 2.0

Please provide the requested information.

Student Identification Number: _____

 Last Name:

First Name:

Middle Initial:

 Birth Month:

Birth Day:

Birth Year:

Please circle the appropriate response to the following questions.

1. What is your sex:

Female

Male

2. What do you regard to be your ethnic background?

Asian Black

Hispanic Native

American White

Other

3. Approximately how many hours per week do you work on or off campus?

0

1-10

11-20

21-30

More than 30

4. What type of residence are you now living in or will you live in once school begins?

A dormitory or residence hall Your parent's home A

fraternity or sorority house The home of a relative A

house or apartment off-campus Other

5. What is your native language?

English

Spanish

Germanic or Slavic (e.g. Russian-Polish-Czech etc.) Arabic

French or Italian

Asian (e.g. Chinese-Japanese-Korean-Vietnamese etc.) Other

6. What best describes your current situation?

Married-No Children
Married-With Children
Single-No Children
Single-With Children

7. What was the highest level of education completed by your mother?

8 or fewer years of formal education Some
high school but did not graduate Graduated
from high school or received G.E.D.
Some college but did not receive a 4-year (Bachelor's) degree Graduated with
Bachelor's degree
Received Master's Degree
Obtained Doctoral degree
Do not know level of education completed by mother

8. What was the highest level of education completed by your father?

8 or fewer years of formal education Some
high school but did not graduate Graduated
from high school or received G.E.D.
Some college but did not receive a 4-year (Bachelor's) degree Graduated with
Bachelor's degree
Received Master's Degree
Obtained Doctoral degree
Do not know level of education completed by father

9. Is this your first semester enrolled at this school (not counting summer school)?

Yes
No

10. Are you a first year student (not counting credits earned in summer or high school)?

Yes
No

11. In terms of credits earned, what is your classification?

First Year
Sophomore
Junior
Senior

12. About how large was your graduating class in high school?

Less than 25 students
 26 to 50 students
 51 to 100 students
 101 to 200 students
 201 to 400 students
 More than 400 students
 Did not attend high school during senior year

13. Which of the goals listed below best describes what you want to accomplish at this college or university?

Complete one or two courses
 Complete a number of courses
 Complete a number of courses and then transfer
 Earn a certificate or associates degree
 Earn a certificate or associates degree and then transfer
 Earn a bachelors degree
 Earn a masters or doctoral degree
 Other

14. Which of the following is most accurate regarding how many online (internet) courses you have taken?

All online
 More than half online
 About half online
 Less than half online
 Only one online course
 No online courses

15. If you are receiving financial aid, check the type of aid that applies to you. You may check more than one.

On-campus work
 Scholarship or grant
 Loan
 State lottery
 Other
 I receive no financial aid

16. Which of the following were important for you in deciding to attend this institution? You may check more than one.

It is close by
 Friends attend here
 The school's reputation
 It has the academic program I want
 Family or relatives attended here
 The school's sports program
 The location or area is appealing
 None of the above apply

College Persistence Questionnaire Student Experience Form, Version 2.0

Instructions: Students differ a great deal from one another in how they feel about their college experiences. This questionnaire asks you about your reactions to many aspects of your life here at this college. Please consider each of the questions carefully, and circle the answer that best represents your thoughts. There are no "right or wrong" answers, so mark your real impressions. There are only 81 questions, and it is very important that you answer all of them. This should take you about 30-35 minutes. Questions 61 to 81 did not load on the ten CPQ factors, however, they are included because some advisors have found them helpful.

Your answers will be treated as confidential information.

Please circle your response to the following items. Be sure to answer each question.

1. On average across all your courses, how interested are you in the things that are being said during class discussions?
 - Very interested
 - Somewhat interested
 - Neutral
 - Somewhat disinterested
 - Very disinterested
 - Not applicable

2. What is your overall impression of the other students here?
 - Very favorable
 - Somewhat favorable
 - Neutral
 - Somewhat unfavorable
 - Very unfavorable
 - Not applicable

3. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?
 - Very supportive
 - Somewhat supportive
 - Neutral
 - Somewhat unsupportive
 - Very unsupportive
 - Not applicable

4. Students differ quite a lot in how distressed they get over various aspect of college life. Overall, how much stress would you say that you experience while attending this institution?
 - Very much stress
 - Much stress
 - Some stress

A little stress
 Very little stress
 Not applicable

5. How easy is it to get answers to your questions about things related to your education here?

Very easy
 Somewhat
 easy Neutral
 Somewhat hard
 Very hard
 Not applicable

6. In general, how enthused are you about doing academic tasks?

Very enthusiastic
 Somewhat enthusiastic
 Neutral
 Somewhat unenthusiastic
 Very unenthusiastic
 Not applicable

7. College students have many academic responsibilities. How often do you forget those that you regard as important?

Very often
 Somewhat often
 Sometimes
 Rarely Very rarely
 Not applicable

8. How confident are you that this is the right college or university for you?

Very confident
 Somewhat
 confident Neutral
 Somewhat unconfident
 Very unconfident
 Not applicable

9. How often do you worry about having enough money to meet your needs?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

10. How confident are you that you can get the grades you want?

Very confident
 Somewhat confident
 Neutral
 Somewhat unconfident
 Very unconfident
 Not applicable

11. Some courses seem to take a lot more time than others. How much extra time are you willing to devote to your studies in those courses?

Very much extra
 time Much extra time
 Some extra time
 A little extra time
 Very little extra time
 Not applicable

12. When interacting with disagreeable people, how often are you courteous to them?

Always
 Usually
 Sometimes
 Rarely
 Never
 Not applicable

13. In general, how satisfied are you with the quality of instruction you are receiving here?

Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied
 Not applicable

14. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?

Very much
 Much
 Some
 Little Very
 little
 Not applicable

15. How difficult is it for you or your family to be able to handle college costs?

Very difficult
 Somewhat
 difficult Neutral
 Somewhat easy
 Very easy
 Not applicable

16. How inclined are you to do most of your studying within 24 hours of a test rather than earlier?

Very inclined
Somewhat inclined
A little inclined Not
very inclined Not
at all inclined Not
applicable

17. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?

Very strong
Somewhat strong
Neutral
Somewhat weak
Very weak
Not applicable

18. How much pressure do you feel when trying to meet deadlines for course assignments?

Extreme pressure
Much pressure
Some pressure A
little pressure
Hardly any pressure at
all Not applicable

19. How satisfied are you with the academic advising you receive here?

Very satisfied
Somewhat
satisfied Neutral
Somewhat dissatisfied
Very dissatisfied
Not applicable

20. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?

Very well Well
Neutral Not
well Not at all
well Not
applicable

21. How often do you turn in assignments past the due date?

Very often
Somewhat often
Sometimes

Rarely
 Very rarely
 Not applicable

22. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?

A lot of thought
 Some thought
 Neutral
 Little thought Very
 little thought Not
 applicable

23. How often do you read educationally-related material not assigned in courses?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

24. How strong is your sense of connectedness with others (faculty, students, staff) on this campus?

Very strong
 Somewhat strong
 Neutral
 Somewhat weak
 Very weak
 Not applicable

25. How good are you at correctly anticipating what will be on tests beforehand?

Very good
 Somewhat
 good Neutral
 Somewhat bad
 Very bad
 Not applicable

26. How frequently do you become jealous of the good fortune of others?

Never
 Rarely
 Sometimes
 Usually
 Always
 Not applicable

27. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?

Very disappointed
 Somewhat disappointed
 Neutral
 Not very disappointed
 Not at all disappointed
 Not applicable

28. How satisfied are you with the extent of your intellectual growth and interest in ideas since coming here?

Very satisfied
 Somewhat
 satisfied Neutral
 Somewhat dissatisfied
 Very dissatisfied
 Not applicable

29. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

30. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?

Very satisfied
 Somewhat
 satisfied Neutral
 Somewhat dissatisfied
 Very dissatisfied
 Not applicable

31. Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?

Very much
 Much
 Some
 Little Very
 little
 Not applicable

32. There are so many things that can interfere with students making progress toward a degree; feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a college degree?

Very certain

Somewhat certain
 Neutral
 Somewhat uncertain
 Very uncertain
 Not applicable

33. How often do you feel overwhelmed by the academic workload here?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

34. How well does this institution communicate important information to students such as academic rules, degree requirements, individual course requirements, campus news and events, extracurricular activities, tuition costs, financial aid and scholarship opportunities?

Very well Well
 Neutral Not
 well Not at all
 well Not
 applicable

35. When you do not get your own way, how often do you feel resentful?

Always
 Usually
 Sometimes
 Rarely
 Never
 Not applicable

36. How much of a connection do you see between what you are learning here and your future career possibilities?

Very much
 Much
 Some
 Little Very
 little
 Not applicable

37. How often do you miss class for reasons other than illness or participation in school-related activities?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely

Not applicable

38. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?

Very much
 Much
 Some
 Little Very
 little
 Not applicable

39. How often do you encounter course assignments that are actually enjoyable to do?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

40. When you consider the techniques you use to study, how effective do you think your study skills are?

Very effective
 Somewhat effective
 Neutral Somewhat
 ineffective Very
 ineffective
 Not applicable

41. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the degree, here or elsewhere?

Very strong
 Somewhat strong
 Neutral
 Somewhat weak
 Very weak
 Not applicable

42. How frequently are you irritated when people ask you for a favor?

Never
 Rarely
 Sometimes
 Usually
 Always
 Not applicable

43. How concerned about your intellectual growth are the faculty here?

Very concerned
 Somewhat concerned
 Neutral
 Somewhat unconcerned
 Very unconcerned
 Not applicable

44. How much do you think you have in common with other students here?

Very much
 Much
 Some
 Little Very
 little
 Not applicable

45. This semester, how much time do you spend studying each week relative to the number of credit hours you are taking? Assume each credit hour equals one hour of studying per week.

Many more hours studying than the credit hours A
 few more hours studying than the credit hours
 The same number of hours studying as the credit
 hours A few less hours studying than the credit hours
 A lot less hours studying than the credit
 hours Not applicable

46. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?

Very large strain
 Somewhat of a strain
 Neutral
 A little strain
 Hardly any strain at all
 Not applicable

47. When you are waiting for a submitted assignment to be graded, how assured do you feel that the work you have done is acceptable?

Very assured
 Somewhat assured
 Neutral Somewhat
 unassured Very
 unassured
 Not applicable

48. How much input do you think you can have on the decision-making process here (on matters such as course offerings, rules and regulations, and registration procedures)?

Very much
 Much

Some
 Little
 Very little
 Not applicable

49. All of us make mistakes in our interactions with other people. If you realize your mistake, how often do you apologize?

Always
 Usually
 Sometimes
 Rarely
 Never
 Not applicable

50. How much do other aspects of your life suffer because you are a college student?
 Very much

Much
 Some
 Little
 Very little
 Not applicable

51. How often do you wear clothing with this college's emblems?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

52. How often do you arrive late for classes, meetings, and other college events?

Very often
 Somewhat often
 Sometimes
 Rarely
 Very rarely
 Not applicable

53. How much time do you spend proofreading writing assignments before submitting them?

A lot Some
 Little Very
 little None
 Not applicable

54. How much doubt do you have about being able to make the grades you want?

Very much doubt
 Much doubt
 Some doubt Little
 doubt Very little
 doubt Not
 applicable

55. Often parents or other people whose opinions are important have unrealistic expectations about how students should perform in college. Thus far, how do you think that those important people would assess your performance?

Far below the level they expected
 Below the level they expected
 About the level they expected
 Better than they expected Much
 better than they expected Not
 applicable

56. How would you rate the academic advisement you receive here? Excellent

Good
 Fair Poor
 Very
 poor
 Not applicable

57. How would you rate the quality of the instruction you are receiving here? Excellent

Good
 Fair Poor
 Very
 poor
 Not applicable

58. When you consider the benefits of having a college degree and the costs of earning it, how much would you say that the benefits outweigh the costs, if at all?

Benefits far outweigh the costs
 Benefits somewhat outweigh the
 costs Benefits and costs are equal
 Costs somewhat outweigh the benefits
 Costs far outweigh the benefits
 Not applicable

59. How likely is it that you will reenroll here next semester?

Very likely
 Somewhat likely
 Neutral Somewhat
 unlikely Very
 unlikely

Not applicable

60. How likely is it you will earn a degree from here?

Very likely
Somewhat likely
Neutral Somewhat
unlikely Very
unlikely
Not applicable

61. How much does the cost of courses limit how many you take? Very much

Much
Some
Little
Very little
Not applicable

62. When you think about the advantages and disadvantages of attending this school, how much do you think the advantages outweigh the disadvantages, or vice versa?

Disadvantages far outweigh the advantages
Disadvantages somewhat outweigh the advantages
Disadvantages and advantages are equal
Advantages somewhat outweigh the disadvantages
Advantages far outweigh the disadvantages
Not applicable

63. During the first class session, many instructors present students with an overview of the course. In general, how accurate have these previews been in forecasting what you actually experienced in these courses?

Very accurate
Somewhat accurate
Neutral Somewhat
inaccurate Very
inaccurate
Not applicable

64. How much do the instructors and the courses make you feel like you can do the work successfully?

Very much
Much
Some
Little Very
little
Not applicable

65. Based on your current financial situation, how inclined are you to work more hours per week than you want in order to pay bills?

Very inclined
Somewhat inclined

A little inclined
 Not very inclined
 Not at all inclined
 Not applicable

66. In general, when you receive evaluative feedback from instructors, how useful has it been in figuring out how to improve?

Very useful
 Somewhat useful
 Neutral
 Not very useful
 Not at all useful
 Not applicable

67. On a typical day, how preoccupied are you with personal troubles?

Very preoccupied
 Somewhat preoccupied
 A little preoccupied Not
 very preoccupied Not at
 all preoccupied Not
 applicable

68. How much does the faculty at this school care about you?

Very little
 Little Some
 Much Very
 much Not
 applicable

69. How much do you think class attendance should count in grading?

Very much
 Much Some
 Very little Not
 at all Not
 applicable

70. Compared to what you anticipated just before entering college, how much work has been involved in the courses?

Much less than expected
 Less than expected
 About the same as expected
 More than expected
 Much more than
 expected Not applicable

71. How fair are the tests at this school?
- Very unfair
 - Somewhat unfair
 - Neutral
 - Somewhat fair
 - Very fair
 - Not applicable
72. The life of a college student typically has both positive and negative aspects. At this time, would you say that the positives outweigh the negatives, or vice versa?
- Positives far outweigh the negatives
 - Positives somewhat outweigh the negatives
 - Positives and negatives are equal
 - Negatives somewhat outweigh the positives
 - Negatives far outweigh the positives
 - Not applicable
73. How clear have the instructors and syllabi usually been in detailing what you need to do in order to be successful in courses?
- Very unclear
 - Somewhat unclear
 - Neutral
 - Somewhat clear
 - Very clear
 - Not applicable
74. On a typical day, how much do you worry about getting your work done on time?
- Very much
 - Much
 - Some
 - A little
 - Very little
 - Not applicable
75. Relative to what you expected when beginning college, how interesting have you found class sessions to be?
- Much less interesting
 - Less interesting
 - About as interesting as expected
 - More interesting
 - Much more interesting
 - Not applicable
76. How much loyalty do you feel to this college, based on your experiences here?
- Very much loyalty
 - Much loyalty
 - Some loyalty
 - Little loyalty
 - Very little loyalty
 - Not applicable

77. How often do you encounter course work that makes you wonder whether you can do it successfully?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

78. If you are supposed to complete a reading assignment before the next class session, how likely are you to actually do it?

Very likely
Somewhat likely
Neutral
Somewhat unlikely
Very unlikely
Not applicable

79. How good is your school performance relative to the expectations of your parents or others who are important to you?

Far below their expectations
Below their expectations
About what they expected
Better than they expected
Much better than they expected
Not applicable

80. If the costs of attending college rise in upcoming semesters, how much strain would that place on your personal budget?

A very large strain
Somewhat of a strain
Neutral
A little strain
Hardly any strain at all
Not applicable

81. How organized are you in terms of keeping track of upcoming assignments and tests?

Very organized
Somewhat organized
Neutral
Somewhat disorganized
Very disorganized
Not applicable