Faculty Perceptions of Nursing Student Retention in Community College Associate Degree Programs: A Qualitative Descriptive Study

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Submitted to the graduate degree program in Nursing and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Abstract

Understanding the factors that influence nursing students to stay or leave a nursing program is vital to ensure our population has prepared nurses to care. Low student retention leads to fewer nurse graduates, negatively impacting the nursing shortage. Although several factors contribute to the nursing shortage, with many well beyond the influence of nursing education programs, student retention is a factor where nurse educators can play a pivotal role. Research indicates that students perceive faculty relationships as influential to their success, satisfaction and retention in education programs. However, a gap in the literature exists on faculty perspectives of student retention, especially in nursing. As nurse faculty are also nurses and represent the profession the students are preparing to enter, their interactions with students are likely relevant to student perceptions about the profession and likely affect students' commitment to persist through their nursing programs. The purpose of this qualitative descriptive study was to describe current nursing student retention practices from the perspective of faculty teaching in community college associate degree nursing programs located in the south-central United States. Semi-structured interviews were conducted to answer the following questions: 1) How do faculty teaching in community college associate degree nursing programs describe current student retention practices? 2) What are nursing faculty perceptions of current retention practices? 3) What are nursing faculty recommendations for retention practices? Results of the data analysis revealed three categories. Category 1, Organizational Influences, describes elements of schools outside of faculty control and decision-making that affect faculty roles. Category 2, The Scope of Faculty, describes the attributes and behaviors of faculty, and the student retention strategies used in their programs. Category 3, *The Perspective on Students*, describes faculty's thoughts on what influenced their students' performances in school. Faculty perspectives on nursing student retention included strategies used to help students, such as individual meetings, test

reviews, and caring behaviors. Compromising admission criteria and standards, degrading, and punishing students did not positively contribute to retention. Recommendations of practices and strategies are provided for other community college nursing faculty.

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Chapter 1: Introduction

The nursing shortage is a current and projected problem in the United States (U.S.), and multiple factors are contributing to this shortage: retiring nurses, an increase in an aging population with chronic health problems, a nursing faculty shortage, limited enrollment capacity and increased attrition of nursing students in programs of nursing (American Association of Colleges of Nursing [AACN], 2019). According to recent estimates, the Bachelor of Science in Nursing (BSN) retention is 79.59%, and the Associate Degree in Nursing (ADN) retention rate is 73.61% (Accreditation Commission for Education in Nursing [ACEN], 2017). The average attrition rate of 26% for ADN students decreases graduation rates as students cannot be replaced in the middle of a program. Understanding factors that affect attrition is vital to creating and implementing strategies to support student success in nursing programs, as 48% of Registered Nurses (RN) entering the profession had the ADN as their initial degree (Organization for Associate Degree Nursing [OADN], 2018).

Researchers have attempted to identify academic and non-academic variables that influence student retention, attrition, and success. Retention in a nursing program is defined as continuous enrollment, taking the required courses sequentially until graduation (Jeffreys, 2012). Attrition is a departure or delay in completing a program and refers to students leaving before program competition (Ascend Learning, 2012). Success can be viewed as passing courses, program completion, and the ultimate criterion of passing the National Council Licensure Exam for Registered Nurses (NCLEX-RN) in RN programs especially as measured by first attempt NCLEX-RN pass rates.

Pre-requisite courses, (e.g., biology, anatomy, physiology), entrance exams, and prior grade point average have been correlated to retention and success in nursing programs (Gilmore, 2008; Higgins, 2005; Lengacher & Keller, 1990; McCarey et al., 2007; Salamonson et al., 2009). In addition, students have reported that interactions and relationships with faculty influence their decisions to stay or leave programs of nursing

(Harrell & Reglin, 2018; Jeffreys, 2014; Taulbee, 2017; ten Hoeve et al., 2016; Wells, 2007). On the other hand, non-academic factors, such as age, perceived stress, and social support have shown mixed correlations with retention or success, perhaps as indirectly affecting retention or success, if at all (Esper, 2009; Gibbons et al., 2010; Jeffreys, 2014; Sayles et al, 2003; Wells, 2007).

Overall, academic performance, personal commitments, environmental influences, and student characteristics contribute to student retention in pre-licensure nursing programs. Researchers suggest that increased student involvement in campus and course activities and increased faculty support are factors consistently identified as positively influencing student retention. Most research has focused on the student, whether related to satisfaction, views on what affects student success, decisions to stay or leave a program, student confidence, and the effects of various interventions (e.g., peer study groups, stress management) (Delany et al., 2016; Farley, 2017; Garcia, 2016; Jeffreys, 2007; Lott & Davis, 2018; Thalluri et al., 2014).

Nursing faculty work directly with students, interacting with students regularly, and often forming supportive, coaching relationships. Faculty can provide a perspective that differs from administrators and school retention staff. Research indicates that students perceive faculty relationships as influential on their success, satisfaction, and retention (Harrell & Reglin, 2018; Jeffreys, 2014; Taulbee, 2017; ten Hoeve et al., 2016; Wells, 2007). Although numerous investigators have explored the issue of student retention, little investigation has been conducted on faculty perspectives of retention, especially in nursing. As nurse faculty are also nurses and represent the profession the students are preparing to enter, interactions with students are likely relevant to student perceptions of the profession. Faculty interactions with students may affect students' commitment to persist through nursing programs. Students often consider their nursing faculty as role models (Wiseman,

1994). Faculty may contribute to student nurses' overall impression of nursing and interactions with faculty may be supportive or potentially discouraging (Jack, 2017).

In this study, nursing faculty (who are also nurses) teaching in prelicensure, associate degree nursing programs were interviewed to explore their current practices and perceptions related to student retention in their nursing programs. The responses were synthesized to clarify current retention strategies, specific to nursing, and to share their recommendations for future retention strategies.

Background

College student attrition has been systematically reported in the literature since the 1970s, with multiple student attrition and retention models developed focusing on the traditional college student (i.e., young, residing on campus, few external responsibilities). Retention models for nursing programs emerged in the new millennium where the college student tended to be non-traditional (i.e., older, non-residential, external responsibilities). Factors affecting retention may differ between traditional and non-traditional students, and between two-year and four-year college programs.

In non-nursing programs, there is a marked difference in retention rates between 2-year colleges and 4-year colleges, and retention rates of institutions tend to be inversely related to the selectivity of admissions. For example, the overall retention rate for 4-year public universities is 81% (National Center for Education Statistics, 2018). However, among universities with the least selective admission process (e.g., open admissions) the retention rate is 62%, while those with the most selective admissions have retention rates of 96%. Two-year institutions have overall retention rates of 62%, with public rates at 62%, private for-profit rates at 66%, and non-profit rates at 72% (National Center for Education Statistics).

Negative impacts exist for the student and society related to attrition. There is a psychological cost to the student who is unable to complete a program, whether it's because

of academic failure, or other factors (Jeffreys, 2012). There are benefits to obtaining a college degree, whether from a 2-year or a 4-year institution. Those with a two-year degree and fouryear degree participate in the labor workforce at greater rates (69.6% and 73.3%, respectively), while those without a degree participate at a rate of 63.4% (Whistle, 2019). Those with a college degree are more likely to be employed. In 2017, overall unemployment rates were 3.6%, while those with an associate degree or a baccalaureate degree had rates of 3.2% and 2.5%, respectively, versus those with some college/no degree at 4% (Whistle). Earning power also increases with college degrees, which increases expendable income, increasing tax revenue. Also, more money is contributed to social security by college graduates, with associate degree holder lifetime contributions over \$81,00 and bachelor's degree holder lifetime contributions over \$135,00 (Whistle). Tax expenditures (e.g., poverty and public assistance programs) are decreased among college degree holders, as those with some college/no degree are twice as likely to live in poverty (Whistle). College noncompletion impacts students and society. Non-completers may be burdened with student loan debt, and they may lose employment opportunities or experience reduced wages because of non-completion. Taxpayers are impacted by wasted subsidies and grants, possible nonrepayment of federal student loan debt, and society is impacted by a less educated workforce and increased poverty rates (Johnson, 2012).

Currently, there are 996 BSN programs and 1,047 ADN programs in the U.S. (AACN, 2020). Even with the over 2,000 prelicensure nursing programs available, there is not enough capacity to enroll all qualified applicants. In 2018, BSN and ADN programs turned away 29% and 38% of qualified applicants, respectively (National League for Nursing [NLN], 2018). The average application to admission ratio is similar for both ADN and BSN programs, with just over half of qualified applicants admitted (ACEN, 2018). Enrollment

capacity in nursing programs is limited due to multiple factors. The primary factors are lack of classroom space, lack of clinical placements, and lack of qualified faculty (NLN).

The structure of nursing programs can contribute to attrition. For example, courses are arranged sequentially, each building on knowledge, attitudes, and skills of earlier courses.

Once a student leaves a program, another student cannot simply take their place. Students must start at the beginning and progressively move forward. Therefore, if a program enrolls 150 students and has a retention rate of 75%, only 112 students from the cohort will be ready to sit for the NCLEX exam.

Community colleges offer opportunities to people who cannot attend universities due to any one of several factors, e.g., location, cost, family responsibilities, and employment obligations. There are significant cost savings and flexible days and times for classes offered at community colleges, which appeal to all income levels and adults who also work and provide for families. Nursing program costs differ significantly between community college associate degree programs and university baccalaureate programs. The average cost at public institutions for an ADN degree is \$6,00-\$40,000 while a BSN costs \$40,000-\$200,000 (McComish, 2019). Nurses who graduate from community college associate degree programs more often work within the same location where they were educated. ADN graduates are essential health care providers in rural and community-based health care systems. Even ADN graduates who complete a BSN are more likely to remain in small towns and rural areas than those who earned a BSN as an initial degree (American Association of Community Colleges [AACC], 2017).

Problem Statement

Student perspectives and characteristics related to retention in nursing programs have been widely studied. However, the faculty perspective has only recently been identified as potentially influential and is in the beginning stages of exploration in the retention literature.

Students have reported that interactions and relationships with faculty affect their nursing school experience, yet the faculty perspective on retention is lacking. Retention rates are tracked by nursing programs as a measure of productivity and poor rates may indicate problems with curriculum, teaching effectiveness, or student mentoring (Billings & Halstead, 2016). Nursing faculty often begin their academic roles following previous clinical careers. Even though nursing faculty might need extensive training for these new academic roles, they do not always have this additional preparation and often move directly from clinical practice to academic teaching. The NLN's Nurse Educator Competencies (2012) calls for faculty to build collegial, caring, and respectful relationships with students to facilitate learning and provide support as students grow into their professional roles. Faculty perspectives on student retention can provide needed insights and strategies used by their institutions or individuals that would increase retention. This study adds to the literature about strategies for increasing nursing student retention. By describing faculty perspectives on nursing student retention, including current retention practices, future recommendations for practice were identified from study participants.

Study Purpose

The purpose of the qualitative descriptive study was to describe current nursing student retention practices from the perspective of faculty teaching at associate degree community colleges located in the south-central U.S. Faculty experiences, practices, and recommendations were synthesized as potential retention strategies that can be implemented in associate degree, community college nursing programs.

Significance

The RN workforce needs to grow by 15% over the next decade, reflecting one of the largest projected growth needs among all employment types. The need for RNs is estimated to grow from 2.9 million in 2016 to 3.4 million by 2026 (Bureau of Labor Statistics, 2019). In

addition to the growth rate and the need for nurses to fill these new positions, an additional 203,700 new RNs are needed annually to replace retiring nurses every year through at least 2026. By the year 2030, 1 million RNs currently in the workforce will have retired, as the average of current RNs is 51 years (National Council of State Boards of Nursing [NCSBN], 2017).

Coupled with the nursing shortage is the aging of the Baby Boomer generation, which means additional older patients in need of nursing care. By 2050, there will be 83.7 million adults over the age of 65 years compared to the 43.1 million adults over 65 years in 2012. This doubling of the population of older adults brings increased needs for health care services and an increased number of people with chronic conditions requiring care (AACN, 2019).

Both BSN and ADN programs prepare most of RNs in the U.S., with only few
Diploma programs still in existence. ADN graduates are 39% of the nursing workforce, and
NCLEX pass rates for ADN-prepared nurses equal those of BSN-prepared nurses (AACC,
2017). BSN programs typically are four-year programs, with 120 required credit hours. ADN
programs are typically two-year degree programs with 60 required credit hours.

Baccalaureate programs encompass all that an associate degree program offers and
additionally offer courses in community/population health nursing, management and
leadership, and research (Robert Wood Johnson Foundation [RWJF], 2013). The BSN
education further prepares nurses to work in a variety of settings and better understand the
cultural, political, economic, and social influences affecting patients and the healthcare
system (AACN, 2019). In 2011, 50% of the nursing workforce was BSN-prepared when the
Institute of Medicine called for 80% of nurses to be baccalaureate-prepared by the year 2020
(RWJF, 2013). Currently, over 60% of the workforce are BSN-prepared, and this trend is
expected to increase as multiple online education progression programs have emerged,
allowing increased accessibility for AND-prepared RNs to obtain a BSN degree. National

nursing organizations have supported this effort, including encouraging the advancement of ADN-prepared nurses to continue their education and earn advanced degrees (AACC, 2017; OADN, 2012; & RWJF, 2012). Forty-six percent of employers of new nurse graduates require a BSN degree, and 88% strongly prefer it over an ADN degree (AACN, 2017).

Recruitment efforts in nursing schools are focused on diversity (AACN, 2019). While a diverse workforce is essential to health equity across the nation, the nursing workforce remains largely homogenous (National Advisory Council on Nurse Education and Practice, 2013). Currently, over 80% of the RN workforce is non-Hispanic White, with men comprising only 9.1% (NCSBN, 2017). In the RN workforce, Hispanics represent 0.4%, with Asians and African Americans at 7.5% and 6.2%, respectively (NCSBN). By the year 2030, projections show the U.S. Hispanic population will make-up 21.1% of the population, with Asian and African Americans at 6.9% and 13.8%, respectively (Vespa et al., 2020). Current nursing student statistics of pre-licensure programs reveal that men comprise 15%, Hispanics are 9.8%, African Americans are 11.8% and Asians are 4.5% (NLN, 2018). Although nursing students are more diverse than the current RN population, continued recruitment efforts of minority populations are important to adequately represent the population they serve (AACN, 2019).

Retention strategies may differ for the traditional versus non-traditional nursing student. Jeffreys (2012) defined the non-traditional nursing student as being older than the traditional 18-24 undergraduate age range, non-residential on campus, and having external responsibilities (e.g., jobs, dependent children). Nationally, approximately 62% of ADN students in nursing programs are over the age of 25, where 77% of students in BSN programs are age 25 or under (NLN, 2018). Although some community colleges award baccalaureate degrees, most ADN programs are in community colleges (Billings & Halstead, 2016; RWJF, 2013).

Community colleges' nursing programs play a pivotal role in the preparation of RNs in the U.S. They are the predominant educational institutions in rural and underserved areas. Almost half of the ADN-prepared nurses stay within 15 miles of their educational institution to work in their communities, while the BSN-prepared nurses seek practice opportunities in urban locations (Institute of Medicine, 2011). Despite these overall successes and contributions to the nursing workforce, retention rates in associate degree nursing programs remain a problem. Identifying new strategies to promote nursing student retention in associate degree programs is vital to the continued growth of the nursing workforce.

Aims and Research Questions

The primary aims of this study were to a) describe current practices and faculty perspectives related to nursing student retention, and b) synthesize faculty recommendations for practices and strategies in student retention.

The research questions (RQs) of this study are:

RQ1: How do faculty teaching in associate degree community college nursing programs describe current student retention practices?

RQ2: What are nursing faculty perceptions of current retention practices?

RQ3: What are nursing faculty recommendations for retention practices?

Summary

As the nursing shortage continues and the need for additional nurses continues to expand, nursing schools are challenged with producing enough well-prepared graduates to fill these system needs. Multiple factors impact schools' ability to admit, educate and graduate new nurses, including faculty shortages, limited clinical sites, lack of classroom space, and the loss of students because of attrition during their programs of study. Factors affecting retention are multi-faceted and include academic and non-academic factors. Student perspectives indicated that relationships and interactions with faculty impact their learning

and influence their success. Faculty perspectives remain an under-explored area and findings from this study provide useful insights in retaining students. This study addressed nursing student retention by identifying current retention practices, as described by faculty teaching in associate degree programs, and summarizing faculty recommendations and strategies for retention practices.

Chapter 2: Literature Review

This chapter presents a review of the literature about 1) the history of student retention in higher education with college student retention models, 2) student retention in nursing education, 3) nursing student retention models, and 4) research on faculty perspectives in nursing education. A comprehensive review of potential factors that contribute to student retention is presented. Gaps in the current literature related to nursing student retention are discussed.

Literature Search Strategies

A literature search was conducted through the CINAHL, ERIC (ProQuest), and PubMed databases to identify articles and dissertations related to college student retention, nursing student retention, and faculty perceptions of college and nursing student retention. Search terms included: "college student retention," "faculty perspectives" and "faculty descriptions" to locate articles outside of nursing. Additional searches were conducted to locate articles within the discipline of nursing. The search terms "nursing student retention," "faculty perceptions OR descriptions" AND "nursing student retention" were used.

References lists from articles and dissertations also were explored for potential applicability. An abundance of literature related to college student attrition and nursing student retention was found. However, specific studies exploring faculty perspectives of student retention were limited, as only eight dissertations and three articles were located.

The literature review begins with the history of student retention in undergraduate education followed by descriptions of college student retention models. Next, student retention in nursing education is addressed including nursing student retention models. Finally, specific studies on faculty perspectives of student retention are described as gaps in the literature are highlighted.

Student Retention in Higher Education

College student attrition has been an important issue in higher education as students are affected academically, financially, and socially, along with the financial loss to an institution when students quit before graduation (American Institutes of Research, 2011; Ascend Learning, 2012; Jeffreys, 2012; Whistle, 2019). Attrition-related research, (originally called student mortality), began with the publication in 1938 of a bulletin by the United States Department of Interior and the Office of Education (McNeely, 1938). Enrollment in higher education increased dramatically post World War II, as the GI Bill of 1950 provided financial aid to veterans who desired a college education. Two million veterans enrolled in college in 1950, and it was during this decade that institutions began to track data on enrollment and attrition (Thelin, 2004). Systematic study of attrition did not take shape until the 1960s when investigators started exploring factors thought to influence attrition (Gekoski & Schwartz, 1961; Panos & Astin, 1968). In 1965, the Higher Education Act increased access to a college education by providing financial aid, and college support services were created to help students academically (McDonough & Fann, 2007). Models of student attrition emerged in the 1970s (Spady, 1970; Tinto, 1975).

Early Retention Studies

The McNeely bulletin of 1938 was the first major study of attrition in higher education. A collaboration between 60 universities across the U. S. and the Office of Education allowed 42 studies to be conducted that examined possible factors associated with attrition. Full-time students who left college before graduation represented student mortality. At the time, attrition rates for public institutions were approximately 50%, and approximately 40% at private institutions (McNeely, 1938). McNeely differentiated students who simply left from those who transferred to another school or left but returned to finish degrees. This distinction was labeled as gross and net mortality, where the students who transferred or returned were subtracted from the gross attrition rate to give a net rate that was posited as

more accurate to represent attrition. McNeely found that most students left in their first year and the net mortality was higher in the Southern states. Data were limited on reasons students left as this information was not routinely collected by institutions. Some data were collected from students who left, though "unknown causes" comprised between 35-83% of responses received (McNeely). Age, location of the home, lodging type, extra-curricular activity involvement, employment, and academic grades were factors included in this study. Results indicated that those aged 20 years or more left at higher rates than those younger than 20 years, those who lived in dormitories or rooming houses left more frequently than students who lived at home or in fraternity or sorority houses, a greater proportion of students who left did not participate in extra-curricular activities, and there was no relationship between the location of home or employment and leaving (McNeely). This study laid a foundation for later studies on attrition and highlighted the potential influence of social integration at institutions which became the focus of theories in the 1970s.

Two major studies in the 1960s examined attrition in terms of comparing differences between students who left and those who stayed, as well as a longitudinal study examining the characteristics of students who left institutions (Gekoski & Schwartz, 1961; Panos & Astin, 1968). Comparing students who left after their first semester to those who enrolled in the second semester at Temple University revealed differences related to course expectations, faculty interactions, college support services, and advising. Students who left reported poorer relationships with faculty and advisors, inadequate course and faculty quality, and unawareness of support services (Gekoski & Schwartz). Similarly, Panos and Astin (1968) found that interpersonal relationships between students, faculty, and activities as well as student personal characteristics influenced attrition. These two studies emphasized that social and personal interactions may have strong influences on attrition, and recommendations included improvements in opportunities for these relationships to grow.

Retention Theories and Models in the 1970s

College retention theories and models emerged and took shape in the 1970s. Spady (1970) created the first widely recognized theoretical and systematic model that incorporated the relationship between the student and the institution, *The Undergraduate Dropout Process Model*. This model had two main systems, the academic (grades and intellectual development) and the social (normative congruence and peer support) both influencing a student's decision to stay or leave an institution. This model was tested in a longitudinal study with students from the University of Chicago and results showed that academic performance was the dominant factor in student attrition (Spady, 1971).

Building on Spady's theoretical ideas on the process of college attrition, Tinto created A Longitudinal Model of Dropout (Tinto, 1975). This model focused on the why and how individuals decided to leave an institution before degree completion, especially voluntary leaving. He sought to answer the question of why students leave. Academic and social factors were active in their interaction between the student and the institution, and this interaction was longitudinal. The model contained several elements: pre-college entry attributes; goals and commitment; experience at the institution; and academic and social integration. The precollege attributes included family, background, skills, abilities, and prior schooling. The student entered college and these pre-entry attributes combined with an individual's goals and commitments. The students were interactive with the academic system (which included academic performance, faculty, and staff interactions) and the social system (which included extracurricular activities and peer group interactions). If the student integrated into both systems, their commitment to the institution increased, and their intention to stay increased. If the students did not integrate within both the academic and social system, their commitment lessened, and their intentions turned to leaving. Tinto later revised his theory in 1993, which is discussed in a later section of the literature review.

Retention Theories and Models in the 1980s

The 1980s began in an economic recession, university enrollments declined, and the make-up of the college student body was changing. College costs doubled from 1974 to 1984, causing many students to enroll in two-year community colleges (Thompson, 1984). More students were women, and one-third of the college student population was over the age of 25 years (Thompson). Institutions shifted their focus to enrollment management that included: managing student marketing, recruitment, admissions, financial aid, retention, and graduation (Demetriou & Schmitz-Sciborski, 2011).

In 1980, Bean created a casual model of student attrition formulated from work/organizational turnover theory, which proposed that institutional commitment was the primary determining factor of attrition, consistent with Tinto (1975) and Spady (1971). This model excluded environmental variables, which later was added to a revision of the model in 1985 with co-researcher Metzner.

Bean and Metzner's (1985) *Model of Non-Traditional Undergraduate Student*Attrition differentiated work from previous models with a focus on the non-traditional student. This model addressed a need to understand the growing population of students who were non-residential on campus, older, had families and jobs that had priority roles in addition to their college responsibilities. Causes of attrition would be different for this student, and traditional retention strategies may not be applicable. Based on the literature on the non-traditional student, Bean and Metzner's framework explained the process of attrition for the non-traditional student. This model had background variables, academic variables, and environmental variables that affected attrition. Background variables included age, high school grade point average (HSGPA), enrollment status, educational goals, ethnicity, and gender. The academic variables included study habits, academic advising, absenteeism, the certainty of major, and course availability. Environmental variables were finances, hours of

employment, outside encouragement, family responsibilities, and opportunity to transfer. All variables contributed to academic or psychological outcomes (or both). Additionally, social integration was part of the model, but as a possible effect on attrition.

Bean and Metzner (1985) claimed that the environmental variables were more important than the academic variables for the non-traditional student. Positive effects of the academic variables were essentially nullified when the environmental variables were poor, and students were likely to leave. A strong support system for the environmental variables would compensate for weak academic support, but not vice-versa. Non-academic factors could compensate for decreased academic success: students with high academic performance would only be retained if they also had positive psychological outcomes. Overall, the social integration from outside the college was more important than the college social integration. (Bean & Metzner).

Integration of the student into college life was the main focus of both Tinto's (1975) and Bean and Metzner's (1985) models. The idea of student integration can take many forms, such as social, academic, and professional. Integration involved other students, faculty, administration, support services, clinical experiences, and personal characteristics. According to these models, integration can be achieved by creating a sense of belonging, or connectedness in the students.

Retention in the 1990s

Tinto (1993) revised his model, A Longitudinal Model of Departure from Institutions of Higher Education, to include external commitments (e.g., family obligations, jobs) and intentions as influencers on student attrition. Students (who all have different personal characteristics, dispositions, and backgrounds) had many interactions with their college life which involved both academic and social factors. These all played together in the decision to leave an institution. Because the interactions between the student and the institution changed

over time, the student also changed their intentions (Tinto, 1993). Tinto's model has been subject to extensive testing and examination over the years and has been cited in many college student attrition studies in various college environments (Berger & Braxton, 1998; Braxton et al., 2000; Brunsden et al., 2000; Cabrera et al., 1992; Elkins et al., 2000; Liu & Liu, 2000; Mannan, 2007; & Pascarella & Chapman, 1983; Pascarella & Terenzini, 1979; Terenzini & Pascarella, 1980; Terenzini et al., 1985).

In the 1990s, the Federal government required colleges and universities to report their retention rates (Student Right to Know Act, 1990). As this became public knowledge and allowed pre-college students to be informed about their potential university's success with graduating their students, studies on retention increased in number. The research focus began with academic factors (e.g., HSGPA, college grade point average (GPA), American College Testing (ACT)/Scholastic Aptitude Test (SAT) results) and then incorporated non-academic factors (e.g., age, social support, stress), as well as a combination of both types of factors in predicting retention.

Multiple studies indicated that academic factors predicted retention in college students. HSGPA, and ACT or SAT scores were strong predictors of retention (Astin, 1997; Lengacher & Keller, 1990; Levitz et al., 1999; Murtaugh, 1999). The studies focused on four-year institutions. Levitz et. al. (1999) found that very selective schools (required high ACT or SAT scores for entrance) had higher retention rates. Murtaugh (1999) found that age correlated with retention, and those at a higher age entering college were more likely to drop out of college. These factors addressed the college student in general, and specific studies of nursing students are addressed in the next sections on nursing student retention history and models.

Retention in the New Millennium

The American College Testing (ACT) Policy Report of 2004 was the first major study of both academic and non-academic factors on retention at four-year institutions. The report found that a combination of academic and non-academic factors had the greatest effect on retention. Non-academic factors studied in the report included academic self-confidence, goals, institutional commitment, and social support. Academic self-confidence referred to a student's confidence in being successful at school. Goals referred to a student's personal goal of achieving a college degree. Commitment to an institution was a student's confidence in the institution and satisfaction with their choice of school. Social support referred to the student's perception of the support services provided by the college. Other non-academic factors explored included: achievement motivation (student's amount of motivation to be successful); academic-related skills (study habits and time management skills); contextual influences (financial aid, school size, and selectivity); general self-concept (self-esteem and self-confidence); and social involvement (student's perception of inclusivity in the school environment, faculty support, involvement in college activities) (Lotkowski et al., 2004).

Results were categorized as strong, moderate, and weak influences on retention. HSGPA and ACT/SAT scores were positively correlated to increased retention, and socioeconomic status had a strong correlation with retention when combined with HSGPA and ACT/SAT scores. Contextual influences (financial aid), social support, and institutional commitment had moderate influences on retention. The weaker influences on retention came from achievement motivation and general self-concept. Academic self-confidence, goals, and academic-related skills had the strongest influence on retention. Overall, the combination of HSGPA, ACT, socioeconomic status, institutional commitment, social support, and social involvement had the strongest relationship to retention (Lotkowski et al., 2004).

that are in place at colleges, creating a greater emphasis on supporting and growing nonacademic factors.

Summary

The first publication on college student attrition came out when attrition rates were approximately 50% and introduced the idea that social integration during college influenced attrition (McNeely, 1938). After this initial publication, attrition rates remained relatively constant for the next two decades (Demetriou & Schmitz-Sciborski, 2011). Researchers did not focus on attrition again until the 1960s when two major studies brought the subject to the forefront. These studies highlighted the potential influences of the social and personal interactions in college on attrition (Gekoski & Schwartz, 1961; Panos & Astin, 1968). In the 1970s, student attrition models were developed. Multiple factors were recognized as influencing attrition and were categorized as academic, social, environmental, and student characteristics when entering college (Spady, 1971; Tinto, 1975).

The 1980s had decreased college enrollments and an increase in students who were older, not living on campus, and often had external commitments such as families and jobs (Thompson, 1984). As previous models represented the traditional, residential college student, the newer model from Bean and Metzner (1985) represented these non-traditional students and added to the growing knowledge of student attrition. In the early 1990s, legislation required colleges to publish retention information allowing prospective students to be more discerning of their college choices. In response, research on retention increased and focused on various academic and non-academic variables thought to influence retention.

Recommendations and retention strategies encouraged institutions to focus on the multiple academic, social, and environmental influences their students faced and provide support services that would meet these diverse needs.

Retention in Nursing Education

Nursing student retention and success have been a focus in the literature as nursing programs undergo accreditation and are accountable for success and retention rates. Nursing school success is often defined as first-time pass rates on NCLEX, the test that grants a nursing license, enabling nurses to practice. Success is also defined by passing courses, and retention refers to nursing program completion. The Accreditation Commission for Education in Nursing (ACEN) is the national accrediting body for all types of nursing programs (licensed practical nursing, associate, baccalaureate, master's and doctoral) and functions to ensure that programs have continuity and meet state and national standards. ACEN assesses the quality of academics, encouraging continuous improvements to ensure quality and current education to students, ensures involvement of faculty and staff in planning and evaluation, and establishes criteria for professional certification and licensure (2019). Accredited nursing programs are eligible to receive federal funding, school credits are eligible for transfer to other programs, graduation from an accredited school is required for entry into graduate nursing programs and these programs provide eligibility to sit for the NCLEX exam. Graduating from a non-accredited nursing program often means that students will not be able to take the NLCEX exam and will not become RNs. Some states will allow graduates to take NCLEX if the nursing program is non-accredited only if the program has been approved by the state board of nursing, however, this is very unusual and reserved for a few hospital-based programs (Gaines, 2020).

Baccalaureate and graduate nursing programs can also receive accreditation from the Commission on Collegiate Nursing Education (CCNE) affiliated with the AACN. The CCNE was founded in 1998 as an autonomous accrediting agency for baccalaureate and graduate programs of nursing, as well as nurse residency programs. The CCNE evaluates nursing programs to ensure accreditation standards are met and encourages continuous quality

improvement through self-assessment, promotion of life-long learning, and self-evaluation ensuring institutions reach their missions, goals, and outcomes (AACN, 2020).

ACEN standards for accreditation include an NCLEX pass rate of at least 80% and require schools to provide evidence of student program competition including ongoing assessment and evaluation (ACEN, 2017). As average nursing student retention rates remain below 80% across the nation, research on nursing student retention continues to be a focus in the literature.

Student Retention 2000-2013

Research on nursing student retention from 2000 to 2013 focused on both academic and non-academic factors including HSGPA, entrance exam scores, grades from pre-requisite science courses, stress, age, race, and academic, peer, and family support systems and their ability to predict retention and/or success.

Academic factors studied included HSGPA, science course GPA, entrance exam scores, and cumulative GPA. These factors were studied with retention, successfully passing courses, and the first-time passing of the NCLEX. Performance in biology, anatomy, and physiology courses, ACT scores, and cumulative GPA were related to increased retention (Gilmore, 2003; Higgins 2005). Standardized tests were predictive of the first-time pass rates on the NCLEX exam (Sayles et al., 2003). In contradiction, Esper (2009) identified weak correlations between success outcomes and science grades, prior GPA, and test scores. Tipton et al. (2008) found no correlation between the National Eligibility Test [NET] exam and test-taking characteristics on passing the NCLEX.

Non-academic factors affecting nursing student retention included age, gender, race, stress, socioeconomic status, family, peer, and academic supports. These were studied with retention, course grades, entrance exam scores, and first-time pass rates on the NCLEX exam. Wells (2003) reported that retention was an effect of the accumulation of various stressors:

academic performance, social, and external environmental stressors. No significant relationship was found between the non-academic factors of age, stress, social support, and peer and faculty support with retention (Sayles et al., 2003; Wells, 2007). Age was a significant predictor of academic success with overall GPA and science course GPA, where those aged 36 to 45 years were more successful than the younger age groups (Cornelius, 2011). However, Goff (2011) found the higher the age of the student, the lower the retention rate. Esper (2009) found no relationship between demographic variables and final clinical grades or exit exam scores. Overall, academic factors showed correlations with retention or success, and non-academic factors have mixed results in terms of direct correlations with success or retention (see Table 1).

Two studies examined both academic and non-academic factors and could not determine if any factors were predictive of retention but together may affect success and influence retention (Hopkins, 2008; Wells, 2007). Variables that affected the success of first-semester nursing students included: reasoning, learning style, analytic, anxiety, and commitment (Hopkins, 2008). Disillusionment with the nursing program and profession, perceived support or lack of support from faculty, student academic goals, and stress dealing with work, family and personal problems affected retention (Wells, 2007).

Stress has not been predictive of retention or academic performance, although indirect effects may be seen (Gibbons et al., 2010; Goff, 2011; Tipton, et al., 2008). Stress affected how students coped with the demands of nursing school. Stress, as interpreted by the students, leads to either distress or well-being. Stress leading to distress occurred more often than the well-being outcome and suggested promotion of support services to students to encourage well-being. The idea was that being in a state of well-being would enhance learning. Self-efficacy and learned resourcefulness improved students' coping skills (i.e., how they deal with stress), and this led to increased persistence. If stress was viewed as a

challenge, then stress increased performance, but if viewed as a threat, then performance decreased (Gibbons et al., 2010; Goff, 2011).

Table 1Nursing Student Retention Variables and Results Summary

Variables	Results
Biology course grades	Correlates with retention ^{1,2}
Anatomy and Physiology course grades	Correlates with retention ^{1,2}
ACT Scores	Correlates with retention ^{1,2}
Cumulative GPA	Correlates with retention ^{1,2}
Demographics (age, gender, race, SES)	Mixed results ^{3,4,5}
Support Systems (family, peer, faculty, academic)	Mixed results or cumulative effects on retention ^{3,4,5}
Stress	Mixed results or indirect effect on retention ^{6,7,8,9,10}

¹Gilmore, 2003; ²Higgins 2005; ³Wells, 2003; ⁴Sayles et al., 2003; ⁵Cornelius, 2011; ⁶Wells, 2007; ⁷Hopkins, 2008; ⁸Gibbons et al., 2010; ⁹Goff, 2011; ¹⁰Tipton, et al., 2008

Nursing Student Retention Models

Nursing student retention models have served as frameworks for multiple studies on retention and/or success. Three models, created by Wells (2003), Shelton (2012), and Jeffreys (2014), are discussed as these are commonly cited in the literature, and incorporate both the traditional and non-traditional nursing student.

Wells' (2003) model took an epidemiological view with the intent of resetting the way student attrition and retention were considered. Wells referred to Tinto's (1993) model and believed that explaining retention about students who were young and lived on campus was outdated, particularly in nursing, where the students tended to be older and living off-campus. Wells posited that faculty support played a larger role in retention than academic variables. She also incorporated various interventions that can be done at three levels of prevention. These prevention levels were based on epidemiology, as with a disease. (Wells).

Primary prevention, in relation to disease, is focused on preventing the disease itself, and on promoting health. For student retention, Wells proposed several interventions that

would be considered at this primary level, which was before starting school. One intervention was to accurately portray nursing school and the nursing profession and to realistically describe the rigors of the program. The second was to educate and train faculty on retention and diversity, as the faculty-student relationship was considered to have strong effects on retention. Third, a group of people focused on retention and retention strategies should be designated (Wells, 2003).

Secondary prevention, in relation to disease, revolves around early detection and preventing harm or death. For student retention, the focus would be on screening students to identify those who may be at-risk for leaving and then intervening. Wells proposed six interventions at this level, including: conduct student satisfaction surveys; create an objective way to identify at-risk students; focus on diversity and examine current practices in the school; examine current attrition rates to determine if a retention program is needed; educate and train faculty in cultural diversity, and use the data from surveys and reports to develop a group of people to focus on retention.

Tertiary prevention refers to recovering from a disease and rehabilitating from harm caused. For student retention, tertiary prevention referred to a school that already had high attrition rates and/or diversity issues. Several interventions given were to conduct exit interviews to determine if any causes may have been prevented, rebuild student confidence, and educate and train faculty (Wells, 2003).

Wells' intent in developing this model was to provide preventative interventions to decrease student attrition. Student support systems, such as the Partnership in Learning for Utmost Success and the TRIO Student Support Services showed students receiving additional supports related to academics, social and financial barriers were more successful and had higher nursing school completion rates than students who did not receive services (Lockie & Burke, 1999; U.S. Department of Education, 2001).

A Model of Nursing Student Retention was developed by Shelton (2012). She posited two main factors that led to retention: academic success (passing courses) and persistence (the student's choice to stay in a program). Building on Tinto's (1993) model, and Bandura's (1977) Theory of Self-Efficacy, Shelton developed this model after studying students in an associate degree nursing program. Shelton claimed that Tinto's model was incomplete as its focus was on a social perspective of student integration into the school. Bandura's theory was not specific to student retention but spoke to the persistence aspect of retention.

Shelton's (2012) model had three major categories that influenced the two main factors of academic success and persistence: the student's background, the student's internal psychological processes, and the student's external supports. Student background included both academic and non-academic factors, such as gender, GPA, family, and financial obligations. The internal psychological processes addressed the self-efficacy aspects, such as personal and professional goals, and the student's belief that they can be successful. The third category, external supports included support factors from family, friends, the workplace, and faculty (Shelton). These all combined and contributed to persistence (the student choosing to stay) and to academic success (the student passing the courses). Both categories led to retention.

Jeffreys (2014) created the *Nursing Universal Retention and Success Model* to give educators a framework to create strategies to increase retention both for undergraduate and graduate nursing students and specifically addressed the non-traditional student. This model most closely fits with the community college student, as these students do not live on campus, often work full or part-time, and may be providing for families. According to an earlier study by Jeffreys (2007), the most cited restrictive variables to nursing student retention were hours of employment, financial status, and family responsibilities. The most

supportive variables were social support, faculty support, college facilities, and academic performance.

Jeffreys (2014) proposed that environmental and professional integration strongly affected a nursing student's decision to stay in a program. Her model focused on not only increasing retention but "optimizing outcomes" (Jeffreys, 2014, p. 425). She indicated that educators should not simply strive for the success of students passing courses and the NCLEX exam, but they should strive to have students who understand and integrate professional values into their upcoming professional roles as nurses. She noted that this is done by integrating the nursing profession into nursing programs. Jeffreys claimed that previous models focused both on attrition and retention with an emphasis on examining why students leave a program, whereas her model examined why students stay in a program. Unlike Tinto (1993), Jeffreys believed in a psychological interaction model over Tinto's social interaction model. She believed that this approach was a better fit for the student today, as many are not traditional university students who live on campus. Although many factors influence a student's decision to stay in a program, Jeffreys claimed that the environmental and professional integration heavily influenced this decision. Her model was also different from previous models in that it included outside forces, apart from a student's academic and personal life. These forces included world events, politics, and issues in the nursing profession (Jeffreys).

The models developed by Jeffreys (2014), Shelton (2012) and Wells (2003) all focused on retention and examined why students stay. Jeffreys provided a framework for retention that included academic, personal, and world influences on decisions to stay at an institution. Shelton claimed that academics and persistence were key factors in retention. Wells provided a framework that included interventions to increase retention, with an overall theme of faculty support. All these models have several elements in common. Student

backgrounds, characteristics, personal commitments, and academic performance all contributed to student retention. A student's self-belief, commitment to the school, and motivation affect the decision to stay.

The models also differ in ways that allow researchers to utilize them depending on the focus of study. Wells' framework is arranged to guide nursing programs in creating and implementing retention strategies, which start before students enter school and continue post-departure. Faculty training in diversity and retention is emphasized throughout the primary, secondary, and tertiary phases. Investigators seeking to further understand various influences on students related to retention could use Jeffreys' or Shelton's models. Studies on self-efficacy, goal setting, and persistence would best fit with Shelton's model, and studies on professional integration or world influences (events, politics) on students would align with Jeffreys' model. All three models recognize that the non-traditional student has become the traditional student. In other words, nursing student demographics are varied with fewer students entering programs who are less than 20 years of age, single with no children, and residing on campuses (Jeffreys, 2014; Shelton, 2012; Wells, 2003).

Student Retention 2014-2020

The last six years of literature related to nursing student retention continued focus on various student characteristics and their possible effects on retention and success, as well as specific student groups such as ethnic minorities, under-resourced and military students.

Another emphasis was the impacts of the faculty-student relationship, family and peer support, student persistence, and an assessment tool to identify student needs.

Faculty advising, interactions, and relationships revealed positive influences on retention in multiple studies, highlighting the importance of positive faculty interactions with students (Fontaine, 2014; Harrell & Reglin, 2018; Taulbee, 2017). Faculty from three different universities used the GROWTH (Growth, Readiness, Opportunity, Work, Time

management, and Habits) tool to help them advise students in an individualized way. The tool contained open-ended questions over affective, psychosocial, and environmental areas that impacted a student's life. The student completed the form and met with the faculty where a detailed action plan was developed. Faculty reported increased caring and that the process facilitated a quality relationship with students. Students reported similar feelings. (Lewis et al., 2020).

Family and friend support also have had positive effects on retention and success. Taulbee (2017) examined perceptions of baccalaureate nursing graduates which showed family support was a significant factor in their success. Similarly, Lott and Davis (2018) identified family and friend support as most influential to success in their study of Accelerated Baccalaureate nursing students. Student persistence was measured after the implementation of a two-day pilot course at a residential university as part of the orientation to the nursing program in a study by Fagan and Coffey (2020). Although this cohort had not graduated yet, so no effects on retention could be measured, students reported an increased sense of belonging due to meeting peers and developing friendships, along with personal connections with faculty (Fagan & Coffey).

Several studies compared completers versus non-completers to identify what differences existed among various profile characteristics based on Jeffreys' NURS Model (2012). Some of these included: demographics, SAT/ACT scores, GPA, environmental factors, institutional integration, friend support, and family support (Farley, 2017; Mays, 2017; Saith, 2017). Farley (2017) found no significant differences but had uneven group sizes (90 completers, 22 non-completers), and the other two studies found some significant differences regarding GPA in prerequisite courses, gender, age and worked hours. One study correlated high school wealth, ACT scores, and demographics with retention and found that

African American students were at higher risk for nursing school attrition than Whites (Patton, 2016).

In a qualitative dissertation from Garcia (2016), themes that affected retention were: stress, awareness of negative peers, the need for self-motivation, making changes to increase success, and using available resources. However, Larmon (2015) found no correlations between self-directed learning readiness and retention, and a stress-management intervention program showed no differences in GPA or attrition (Delany et al., 2016).

Specific populations of students were the target population in several studies. A mentoring program between nurses with military backgrounds and student nurses who were medics or corpsmen showed no differences in GPA (McNeal, 2019). A retention program specific for minorities showed no differences between race/ethnicity and attrition (Cantwell et al., 2015). Factors identified that influenced or impacted the success of African American and other ethnic groups included institutional commitment, communication of expectations, academic, social, and financial support, feedback, involvement, including joining ethnically diverse study groups and preparing a detailed plan of study (Dapremont, 2014; Ferrell & DeCrane, 2016). Identifying the assumption that nursing students whose primary language was not English would be less successful and more likely to leave nursing programs, Donnell (2015) conducted a secondary analysis of an English as a Second Language reading comprehension program. Contrary to the assumption, nursing students enrolled in this program had higher rates of attrition. Under-resourced and diverse students were included in Project REACH, a program supporting nursing students through an interdisciplinary approach (Kruse et al., 2020). Professionals from the social work department (coping and stress skills and referrals), business department (financial skills), the English department (writing skills) regularly met with students. The nursing faculty were the mentors for these students, and students received stipends for participating in the project's workshops and

meetings. Results showed increased retention in these two-years and increased trusting relationships between faculty and students (Kruse et al.).

England, Canada, The Netherlands and Australia also struggle with nursing student retention and nursing shortages. Wray et al. (2014) studied factors that influenced English nursing students to leave or remain in their programs, finding that determination to become a nurse outweighed many pressures and influenced them to stay. A school in Australia implemented a study-buddy program that differed from traditional mentoring programs as the buddies were in the same cohort. Mentors, or buddy leaders, were high achieving students who mentored the buddies, i.e., students who were not as successful. There was a significant difference in pass rates, and the authors recommended examining peer coaching programs for strengths and weaknesses, training buddy leaders, defining criteria for selection of leaders, and increased support for under-represented students (Thalluri et al., 2014). The Canadian study examined confidence levels before and after implementation of an orientation program for LPN students which resulted in increased levels of confidence, thought to affect their ability to be successful, though success rates were not measured (Jacobs, 2016).

ten Hoeve et al. (2016) used an exploratory descriptive design with a phenomenological approach in their study of the factors that contributed to students remaining in or leaving a nursing program in the Netherlands. Their sample was comprised of 17 baccalaureate nursing students, and purposive sampling was employed based on a prior study's results. This prior study examined students who have never considered leaving the program (n=8), those who have considered leaving (n=7), and those who did leave (n=2). Semi-structured interviews were done with an interview guide. Students' reasons for leaving the program were a perceived lack of support from peers and faculty, and important factors for staying in a program were feeling welcomed and working in a "nice team" (ten Hoeve et al.). The researchers used thematic analysis, with themes (topics from interview guide) and

open coding (themes derived from the data). The welcoming/unwelcoming feelings were associated with clinical placements. They concluded that a reason for leaving was a lack of support from mentors and clinical teams. Students who had considered leaving were motivated to stay if they perceived support from those same people at clinical sites.

Faculty Perspectives

Multiple studies referred to the relationship between faculty and student interaction and retention. Students reported that positive and supportive relationships with faculty influenced their success and contributed to decisions to persist (Fontaine, 2014; Harrell & Reglin, 2018; Jeffreys, 2007; Shelton, 2012). Perceived lack of support from faculty and feeling unwelcome were cited as influential when students considered leaving a program (ten Hoeve et al., 2016; Gramas, 2013). Faculty perspectives on nursing student retention have not been explored in-depth, as no published articles and only two dissertations addressed the topic in the literature (Gibbs, 2018; Gramas, 2013). Six dissertations addressed faculty perspectives related to higher education, simulation, online teaching, academic advising, horizontal violence; clinical, and mentoring (Barnes, 2018; Davis, 2014; Flott, 2017; Dhesi, 2017; Herlihy, 2017; O'Conner, 2017). In 2020, five articles were published on faculty perspectives over safety in simulation, the pre-brief phase of simulation, teaching ethics, teaching cultural competence, and physical assessment skills (Kostovich et al, 2020; Herlihy & Teel, 2020; Grason, 2020; Chen et al., 2020; & Fusner et al., 2020). Four articles related to faculty perspectives in higher education (two in nursing education) were identified and these are discussed first.

Zerquera et al. (2016) used focus groups and interviews with 33 faculty members to explore faculty perceptions of the non-traditional student on non-residential campuses, as these students often carried multiple responsibilities, and faculty was the primary contact for these students when on campus. Faculty were aware of the multiple demands students faced

outside of the college environment (family, job, financial strain). The researchers also uncovered an assumption that students did not adequately anticipate the time commitment college would require, and the expectation that students must categorize their time and responsibilities to be successful. Other perceptions related to employment and academic preparedness, where some faculty believed it beneficial if students worked in the field they were studying, and overall, students were not prepared for the content or navigation of institutions, some blaming secondary education for the problem. Faculty described ways they tried to connect with students and build an individualized relationship with them by being available before and after classes and providing flexibility with coursework. However, several faculty did not feel responsible to re-teach or spend time on the basics if students were ill-prepared, or students did not want to make the effort or take the needed time to succeed. Some faculty also thought that some students were simply not interested enough to be successful (Zerquera et al.).

A study on faculty perspectives of incivility among students in dental hygiene explored types of behavior considered uncivil and the effects of this behavior on faculty. The most frequent uncivil student behaviors faculty reported were students eating/drinking, using cell phones, leaving or arriving late, and being unprepared for class sessions (McCarthy et al., 2020). Faculty were most affected by students using sarcastic or disrespectful tones when communicating. This affected the faculty's confidence, career satisfaction, and longevity (McCarthy et al.).

Baker (2010) studied faculty viewpoints on retaining minority students in undergraduate nursing programs. Baker developed an online survey that addressed 14 retention variables and was completed by 138 full-time faculty from both BSN and ADN programs. Three strategies used by all institutions except one emerged with very effective results: faculty availability (54%, n = 74), timely feedback on tests (53.3%, n = 73), and

timely feedback on clinical performance (65%, n = 89). Although faculty were answering this survey with the minority student in mind, these three strategies may be effective for all nursing students. As students have often reported relationships with faculty influence their success, it remains important to include faculty perspectives and input on retention strategies (Baker).

In the fourth study, Dycket et al. (2009) explored both female faculty and male nursing student perspectives on classroom education in a qualitative ethnographic study on gender relations from two Canadian BSN programs. The investigators found that male students took on traditionally masculine roles such as group leader, used assertive communication, and were risk-takers by confronting instructors. Female instructors often singled out the male students, requesting a male perspective in classroom discussion, which was then perceived by male students as distancing versus incorporating. Also, in teaching certain content, such as gynecology, female instructors would often say "you know what I mean," further distancing the males in the classroom. This study revealed rather fixed gender roles in nursing education, which should be an alert to educators regarding potential factors contributing to male nursing student retention (Dycket et al.).

Gramas (2013) described faculty perceptions of the faculty-student relationship in her dissertation research. Student perspectives of the value of relationships with faculty were evident, and students felt this contributed to or harmed their success in nursing programs. Gramas specifically addressed faculty views of their role as teachers and role models. Thirteen full-time faculty from three different associate degree programs were interviewed. Prominent themes from this qualitative study were communication, role-modeling, and caring. Communication related to the use of titles when addressing faculty, and various forms of contact such as email and text messaging. Communication could be distancing (using formal titles, email only) or as decreasing barriers by use of first names and text messaging.

The faculty felt responsible for demonstrating caring behaviors both in patient and student interactions, and to serve as a caring role model. Faculty often used parent-like language in their descriptions of their relationships with students, whether guiding students or setting boundaries. Interestingly, as in Zerquera et al.'s (2016) work, student deficiencies were viewed as reasons for their failure in nursing programs. Faculty perceived student inability or under-preparedness in academia, financial problems, and external forces (such as job or family responsibilities) as causes for student failure. Faculty did not perceive having a role in student non-success, whether from curriculum issues, teaching inefficiencies, or poor faculty-student relations. However, faculty felt that positive relationships with students impacted their success, and any assistance faculty gave whether on an individual basis or a group (such as test-taking strategies, organizational assistance) contributed to student success.

In a qualitative dissertation, Gibbs (2018) explored nursing faculty perceptions on their role in retaining nursing students at proprietary institutions. She used Tinto's theory of student persistence as a guiding framework, as the results may support the model in that integration of students both academically and socially would increase their chances of success, with faculty as a pivotal role. The focus of the study was to determine if faculty have expectations regarding their role in retention and if this was expected of them, determining if training had been provided. Four themes emerged from data analysis. The first was that faculty felt the development of a relationship with students outside of the classroom was important, whether by mentoring, being available with office hours, or providing review sessions. The second theme addressed community and academic resources. Four of the ten interviewed expressed responsibility for having community partnerships to assist students with various needs. Third, educators felt a responsibility to seek strategies to help students with their academic performance, either from institutional resources (learning centers) or curricular (Kaplan). Several faculty regularly reviewed grades to identify at-risk students

early in the semester. The final theme centered on the need for formal faculty training regarding retention practices. Most participants did not receive any training on retention and informally would seek out assistance when students requested help. The main recommendation from this study was for effective, formal training programs specific to nursing for faculty regarding retention strategies.

In summary, faculty viewed their availability to students as influential, whether with office hours, review sessions, or timely feedback on performance. The faculty were responsible to guide students to resources both academic and personal. However, the faculty did not feel responsible for students' failures. Instead, faculty perceived that students who failed were not prepared for college or lacked interest and motivation. Faculty perceived their availability and positive interactions with students as contributors to success.

Summary

Early student retention research in higher education explored why students leave college. Models incorporated personal, academic, and social characteristics and student interaction with their institutions. Understanding individual characteristics of the incoming student and increasing their interaction with the college, both academically and socially determined whether a student left college before graduating. For the non-traditional, non-residential student, the integration into the social and academic aspects of college was less influential than the student's social support systems outside of college.

Academic factors (HSGPA, ACT/SAT scores) were the main focus of early studies on attrition. The incorporation of non-academic variables, which were represented in the attrition models, was prevalent in studies. Although individual non-academic factors proved difficult in predicting attrition, when combined with academic factors, influences existed.

Nursing school programs are different from many college program pathways. Nursing courses are sequential, and each course is a prerequisite to the next course. When students

leave a nursing program, their slot cannot be replaced with another student. Nursing schools have suffered from low retention rates for years, and the outcome is fewer students graduating and entering the nursing workforce.

Overall, research in both baccalaureate and associate degree nursing programs showed that academic factors affect retention, particularly pre-requisite science course grades, ACT/SAT scores, prior GPA, and entrance and standardized exams. Findings were mixed regarding non-academic factors as determinants of retention. Studies on age, gender, stress, and SES and their effects on nursing student retention often had contradictory results or revealed possible indirect effects on retention.

Nursing retention models were different than previous generic college retention models as nursing models explored reasons students stay in programs. Student background characteristics when entering nursing programs, commitments outside of college, self-belief, motivation, commitment to the school, and academic performance all influenced their decision to stay. The models had common strategic themes of increasing student involvement both academically and socially and increasing faculty support.

The last five years of research on nursing student retention revealed an abundance of student perspectives. Themes included student satisfaction with faculty advising, student characteristics' influence on retention, student perceptions on reasons and factors they left or stayed in programs, stress management intervention effects, peer study group effects, confidence levels effects, and ethnic influences on retention.

Faculty perspectives on various topics in higher education have only recently been explored. Dissertation topics included were perspectives on minority students, interactions between male students and female teachers, the pre-briefing stage of simulation, effects of simulation on clinical performance, horizontal violence in academia, facilitating clinical learning in acute care, academic advising, the student-faculty relationship, the role of faculty

in retaining students at proprietary institutions, and faculty and student perceptions of mentoring.

Nursing student retention remains a problem for all types of programs in the U.S. and abroad. Retention models and current research continues a focus on the student, although the influence of faculty is becoming a more prevalent theme. As faculty influence is a noted theme in literature from student perspectives, exploring faculty perspectives in nursing education is vital to understanding multiple views of education and retention.

Gaps in Literature

As previously noted, studies from the students' perspective are abundant in the student retention literature. Student perspectives of what factors impacted their success or failure have been explored, however, research on faculty perspectives on nursing student retention is sparse. The two dissertations exploring the faculty-student relationship and the faculty role and training in retention were interpretive qualitative studies guided by theoretical frameworks (Gibbs, 2018; Gramas, 2013). Findings from these studies suggest that more faculty perspectives are needed, as one study interviewed faculty from the same institution, and the other study included three institutions. Although these theory-guided qualitative descriptive studies have provided a good start, the next step is to move forward without a framework to see what other insights might be discovered.

Chapter 3: Methods

The purpose of this qualitative descriptive (QD) study was to explore nursing faculty perspectives of student retention practices in pre-licensure, associate degree community college nursing programs in the South-central United States. This chapter presents the methods used in the study. Study design aims and research questions, sample and setting, data collection, and analysis are described along with the rationale. Study rigor and protection of human subjects also are described.

Design

Nursing faculty perspectives of student retention practices in pre-licensure, ADN community college programs were explored in this qualitative descriptive study. Semi-structured interviews using open-ended questions were conducted with nursing faculty to answer the research questions.

A qualitative descriptive design allows the researcher to remain close to the data and naturally presents data, without a pre-selected theoretical framework that may inhibit or lead the information received from participants (Sandelowski, 2010). The descriptive methodology involves less interpretation by the researcher, as data are presented in ways to let the consumer make their own decisions and interpretations. A descriptive design is frequently used when little is known about the topic, and when attempting to describe phenomena from the experiences of those involved. It is commonly used with the naturalistic paradigm (Sandelowski, 2000). As nursing faculty perspectives and experiences of student retention have been minimally studied, a descriptive design was most appropriate for this study.

The naturalistic paradigm was the philosophical basis for this study. Lincoln and Guba (1985) developed the naturalistic paradigm, based on the constructivist view which claims that reality is different for different groups of people, and meaning is a subjective construction and influenced by interactions with others. Basic assumptions include truth and

facts. Truth does not correspond to an objective reality but is comprised of shared meanings among groups of people. Facts are reality as a social construction. Humans construct everything in existence as something, name it, and apply connotations that vary depending on context. Content can only be understood within a context (Lincoln & Guba).

In qualitative research, the collection of multiple realities and experiences of groups of individuals are vital to gain an understanding of phenomena (Sandelowski, 2010). Everyone has a worldview, and everyone's reality is valuable, including the researcher's. The researcher cannot present an objective reality but brings their worldview and bias into interpretation and presentation of data (Patton, 2015).

The focus of this study was on a group of individuals sharing a similar experience as faculty in community college ADN programs. The data they provided through descriptions of their perceptions was in the context of their environments and experiences with nursing student retention.

Content analysis allows for the categorization of textual data to find patterns by examining frequencies and relationships (Sandelowski, 2000). Conventional content analysis is an ideal method for qualitative descriptive designs, as it aligns with the naturalistic paradigm, describes phenomena, and coding categories are generated from the data (Hsieh & Shannon, 2005). Elo and Kyngas (2007) described three phases of a study's process: preparation, organization, and reporting. Preparation included selecting the participants, conducting interviews, reading and re-reading the interview text. The organizing phase included coding the text into meaning units that contained related aspects of content, condensation which shortened the text while retaining complete meaning and creating subcategories and categories through abstraction. Abstraction involved grouping together similar and sub-categories into main categories and the reporting phase presented the results of the analyzing process (Elo & Kyngas).

The process of this study used the three phases described by Elo and Kyngas (2007). Preparation included faculty recruitment for participation and whole interviews were the unit of analysis (Graneheim & Lundman, 2004). Following recording and transcription, interview text was read and reread carefully and deliberately for immersion and understanding (Polit & Beck, 2017). Next, the organizing phase included condensing text, coding the text, grouping codes as similarities were found, and creating categories and sub-categories of content. This iterative process was done through abstraction (Elo & Kyngas, 2007). Finally, in the reporting phase, the results were presented as categories and sub-categories, at the descriptive level of content (Graneheim & Lundman, 2004). Impressions, thoughts, and decisions made by the student researcher were recorded as a measure of trustworthiness throughout the analytic process (Hsieh & Shannon, 2005).

Aims and Research Questions

The primary aims of this study were to a) describe current practices and faculty perspectives related to nursing student retention, and b) synthesize faculty recommendations for practices and strategies in student retention.

The research questions of this study were:

RQ1: How do faculty teaching in associate degree community college nursing programs describe current student retention practices?

RQ2: What are nursing faculty perceptions of current retention practices?

RQ3: What are nursing faculty recommendations for retention practices?

Sample and Settings

Faculty currently teaching in pre-licensure, community college ADN programs were invited to participate. Purposeful sampling was used to allow for exploration of information-rich cases and suited a qualitative descriptive study as an in-depth exploration of the research questions was sought (Patton, 2015; & Sandelowski, 2010).

Participants with experience teaching community college ADN students were necessary for this study as well as their ability and willingness to share their experiences (Magilvy & Thomas, 2009). Variation is an important concept in purposeful sampling. Maximum variation sampling allows for the exploration of both commonalities and unique qualities among a certain population (Sandelowski, 2000). Faculty from a variety of community colleges were invited for audio or audio/video calls. The goal of sampling for this study was to have examples that are representative of a particular subject (Polit & Beck, 2017).

Inclusion criteria included community college ADN faculty, from an ACEN accredited institution, who had a minimum of two years of full-time teaching experience. Faculty who only teach in the clinical setting, or who teach in licensed practical, vocational, baccalaureate, or graduate nursing programs were excluded from the current study.

Purposeful sampling is used to obtain the most information-rich cases to study (Sandelowski, 2010). Therefore, the goal of this sampling strategy was data saturation. As defined by Grady (1998), data saturation occurs when "the researcher begins to hear the same comments again and again, data saturation is being reached... It is then time to stop collecting information and to start analyzing what has been collected" (p. 26). Sample size in qualitative inquiry is flexible in that the minimum number of participants is chosen based on logic and similar previous studies but can grow if saturation is not reached. However, if saturation is reached the initial projected sample size may decrease. Also impacting sample size is the depth of the interview. If posed questions elicit in-depth responses, an interview may last longer, providing in-depth information that may decrease the overall sample size if saturation is reached (Patton, 2015).

Qualitative studies exploring nursing faculty perspectives or faculty descriptions averaged a sample size of twelve participants, with a minimum of eight participants (Barnes,

2018; Herlihy, 2017; Davis, 2014; Gramas, 2013). The size may be adjusted as fieldwork occurs (Patton, 2015). As this study invited faculty from a similar region in the U.S. with information-rich knowledge of the study topic, fewer participants were needed to reach data saturation (Patton, 2015). Nine faculty were interviewed, with seven different schools and/or locations represented. All interviews were included in the analysis, as perspectives varied greatly even within the same school. Saturation was reached as faculty responses to the questions became similar and no new content areas were identified.

Recruitment of Participants

Recruitment of participants was limited due to the COVID-19 virus pandemic that occurred starting in March 2020. The student researcher contacted Deans/Directors of Nursing in qualified ADN programs in Oklahoma, Arkansas, and Kansas. An invitation letter (see Appendix A) was emailed to the Deans/Directors that described the study and sought assistance in forwarding a flyer to their faculty (see Appendix B). In-person events did not occur, so flyers were not dispersed at meetings or conventions. This strategy was enough to identify and recruit the participants in the study.

Due to the COVID-19 pandemic, faculty interviews were conducted virtually. Participants chose whether they preferred the Zoom platform (video and audio) or an audio-only phone call. Participants were encouraged to choose a quiet setting for the interview. Minimizing distractions and noise is important for focus during the interview and transcription following the interview (Patton, 2015).

Data Collection

Institutional Review Board (IRB) approval was obtained from the University of Kansas Medical Center (Appendix C), and data collection began soon thereafter. Initially, the student researcher conducted phone-based practice interviews with two faculty who met the inclusion criteria but were not included in the study because they were colleagues of the

student researcher. These practice interviews allowed the student researcher to refine the interview guide, practice interviewing, and use the recording equipment.

Data collection was conducted using a semi-structured interview guide to conduct interviews with community college ADN faculty (see Appendix D). A semi-structured interview guide with open-ended questions is commonly used for in-depth interviewing (Sandelowski, 2010; Magilvy & Thomas, 2009; Mills & Birks, 2014). This study used open-ended questions from the semi-structured interview guide to obtain perspectives of nursing student retention from participants. Seven of the nine participants were interviewed via Zoom, and two were interviewed via phone call. The student researcher emailed the consent form, which did not require a signature (Appendix E) and collected demographic information (Appendix F) at the beginning of the interview. All interviews were audio-recorded, transcribed verbatim, and analyzed.

Questions in the interview guide were organized by teaching experience, and then by research questions 1, 2, and 3. The interview questions on what resources students need, why students stay or leave nursing programs were based on the literature review of student perspectives on retention. Using descriptive statistics, demographic data and teaching experience data were compiled and presented in Chapter 4. The information from Category 1 and Category 2 provided answers to RQ1, as faculty described the organizational factors involved and their current retention practices. Data from Category 1 and Category 3 answered RQ 2, which described faculty perceptions of the barriers that students faced, why students remained, or left programs, and the resources needed. Finally, RQ3 was answered with Categories 1 and 2, as faculty provided recommendations for retention practices.

Interviews were arranged at the participants' choosing and availability. Field notes were kept immediately following interviews to record interactions, overall impressions, and non-verbal communication (available via Zoom). Permission was received from the

participants for potential follow-up phone calls or emails for possible clarification of data and member checking procedures.

Data Storage

Interviews were recorded on a digital recording device as mp3 files. Participants chose a pseudonym at the start of the interview and this was the only name used on recordings and transcriptions. Digital transcripts, demographic data and field notes were stored on a protected network drive.

Data Analysis

Conventional content analysis was used for this study, as this approach most aligns with the naturalistic paradigm, and is the ideal method for descriptive studies (Hsieh & Shannon, 2005). The process of this analysis used the three phases of preparation, organization and reporting as described by Elo and Kyngas (2007). Preparation included faculty recruitment for participation and whole interviews were the unit of analysis (Graneheim & Lundman, 2004). The organizing phase involved selecting meaningful units from the interviews, condensing text, coding the text, grouping codes as similarities were found, and creating categories and sub-categories of content.

Content analysis was completed as described by Graneheim and Lundman (2004) with the modification of excluding themes. The first step in the process was identifying the unit of analysis, which were the interviews. The student researcher read the transcripts repeatedly for thorough reviews for accuracy and immersion, highlighting significant statements and words that related to the same general meaning. Notes were made of thoughts and impressions as the student researcher read through the data. Through condensation and abstraction, text from the significant meaning units was reduced, without losing meaning, into shortened versions of the statements (condensed meaning units). Key thoughts from multiple participants generated initial codes. Codes were then organized into groups of

similar content areas which became three categories and seven sub-categories. Finally, findings related to current knowledge and recommendations for future research are discussed in Chapter 5.

Peer-debriefing with a dissertation committee member who specializes in qualitative methodology and the committee co-chairs was utilized to ensure rigor, as they can verify clarity, logic and the conclusions drawn by the student researcher (Marshall & Rossman, 2016). Member-checking occurred during interviews as well as after data analysis. Several times during the individual interviews, the student researcher summarized what the participant said, and asked for confirmation in understanding so both the student researcher and participant had full comprehension and agreement on the data (Mills & Birks, 2014). After data analysis, the student researcher emailed portions of the results section to participants for verification of findings. Several participants responded and confirmed the findings.

Rigor

Lincoln and Guba (1985) were the first researchers to transform the standards for quality quantitative research into qualitative terms that aligned with a qualitative methodology. The terms reliability, validity, objectivity, and generalizability are terms used to evaluate the quality of quantitative research, which often has a goal of demonstrating causality in studies (Marshall & Rossman, 2016). These terms, however, do not fit with the qualitative descriptive study, where discovery and descriptions of events, emotions, and experiences are presented to increase understanding, not determine causality. Instead, Lincoln and Guba (1985) termed credibility, transferability, dependability, and confirmability as methods to ensure the trustworthiness of a qualitative study. Trustworthiness is the term used in qualitative research to ensure the efforts and rigor the researcher employs to accurately represent the accounting and meanings participants provide, including the researcher's

influence in research. Trustworthiness is a process that is iterative, inter-related, and all-encompassing. The researcher must choose a framework to evaluate the trustworthiness that closely aligns with the methodology chosen for a particular study (Mills & Birks, 2014).

As data analysis for this study was based on the steps outlined by Graneheim and Lundman (2004), the methods for establishing trustworthiness were based on their descriptions of credibility, dependability, and transferability in determining trustworthiness. Their interpretation of these is closely aligned with Lincoln and Guba (1985).

Credibility

Credibility is how well the data collected and analyzed addresses the focus of the study (Graneheim & Lundman, 2004). It includes participant selection, data collection methods, amount of data, meaning unit choices, and category creation. Faculty participants were chosen from community college ADN programs, to obtain a variety of teaching experience, not only in terms of the level of students taught but years of teaching experience. A variety of experiences added to the richness of data collected, as multiple perceptions were captured. Data collection was completed as semi-structured interviews, ensuring that participants had the opportunity to answer the same questions, yet the freedom to expand on topics they felt were important. The amount of data collected was based on saturation.

Meaning units were developed during data analysis with care taken to capture accurate depiction of concepts or thoughts. The final products of the analysis process were categories, which fully captured the data.

Several techniques to ensure credibility were taken by the student researcher. First, direct quotes from the participants were incorporated into the study's findings to highlight the relationship between categories and remain true to the data. This allows the reader to judge and make inferences based on direct participant responses. Second, the data analysis process was overseen by the committee methods member and co-chairs. This process of peer-

debriefing ensured that findings were grounded in the data and acted as a confirmatory method (Marshall & Rossman, 2016). Member-checking with the participants during the interview and post-interview ensured that the student researcher was in congruence with the participants and accurately depicted their experiences.

Dependability

Dependability is how reliable the data are, as decisions made throughout the data collection and analysis processes may change (Gruneheim & Lundman, 2004). To ensure dependability for this study, the student researcher was the only one collecting data, and field notes and an audit trail were kept to document adjustments in processes and decisions made during data analysis. Thus, the process and the results were transparent (Marshall & Rossman, 2016).

Reflexivity is an important aspect of dependability. Reflexivity is "an active, systematic process used by the researcher to gain insight into their work that will guide future actions and interpretations" (Mills & Birks, 2014, p. 260). The researcher is the research instrument and therefore cannot be completely separate from the research process. The researcher is involved in the relationship with the participant and brings his/her assumptions, values, judgments, cultural and social perspectives (Patton, 2015). Although unavoidable, these influences can be acknowledged and therefore minimized (Marshall & Rossman, 2016). The term "bracketing" has been applied to the process of reflexivity, where the researcher's positionality and assumptions are acknowledged and documented to increase objectivity during data collection and analysis (Mills & Birks, 2014).

To bracket, critically self-reflect and maximize self-awareness, a reflexivity matrix developed by Rae and Green (2016) was utilized (see Appendix G). Eight cells represented the following: researcher motivations, relationship to the field of study, contemplation of interests and conflicts of interest, differences between self and participants, assumptions,

scholarly opinions, analytical authority, and motivation for premature closure. The term "health care topic" was substituted with "nursing education". The first three cells were completed pre-research to reflect on the student researcher's motivations, relationship to the field, and exploration of potential influences from the retention literature. Cells 4, 5, and 6 were completed during data collection to reflect on the similarities and differences between the student researcher and the participants, and on any changes that affected either party. Shared language, potential assumptions, and undue influence of opinion on interview questions were examined. The final two cells occurred during the data analysis phase, where the student researcher examined her own experience's influence on analysis such as dismissing commonplace information that would not be commonplace to others outside the profession, what data are omitted, and the student researcher's potential desire for certain outcomes. Using this matrix design along with an audit trail of decisions made enhanced the dependability of the findings of this research study.

Transferability

Sandelowski and Leeman (2012) discussed transferability as the responsibility of the researcher to present findings in clear language that the reader can then infer and decide whether or not a study's findings can be applied to other persons or experiences. Granheim and Lundman (2004) agreed that transferability mainly relies on the reader, although the researcher may give suggestions on how findings might apply to other situations.

Transferability encompasses all parts of the research process, as clear and detailed descriptions of participant selection, context, data collection, and analysis are required.

Triangulation, the process of applying and comparing multiple sources, theories, or models to results can increase transferability (Marshall & Rosman, 2016). This process was completed in the discussion section of this research study.

Ethical Considerations

A Flexible IRB Review was sought as this study was behavior-focused with minimal risk. Following approval from the University of Kansas Medical Center Human Subjects Committee, letters of invitation along with an invitation flyer were emailed to the Deans/Directors of community college ADN programs. The student researcher supplied contact information and information about the study on the flyer (Appendix B). Consent to participate was obtained through email. Faculty participants chose a pseudonym to protect their identity and this was used on all transcripts and documents.

Chapter 4: Results

This chapter presents the demographic data and teaching experience of the interviewed faculty participants, and the results of the content analysis process to answer the three research questions: 1) How do faculty teaching in associate degree community college nursing programs describe current student retention practices? 2) What are nursing faculty perceptions of current retention practices? 3) What are nursing faculty recommendations for retention practices?

This study was completed during the COVID-19 pandemic. In-person interviews and observations were not possible. Faculty interviews were conducted via the Zoom platform or telephone calls using a semi-structured interview guide. The interview recordings were transcribed verbatim and checked for accuracy. Content analysis was completed following the guidelines of Graneheim and Lundman (2004). Three categories emerged from the data analysis and include: 1) Organizational Influences, 2) The Scope of Faculty, and 3) The Perspective on Students.

Sample

Nine nursing faculty from Arkansas, Kansas and several regions of Oklahoma were interviewed for this study. Seven associate degree community college nursing programs were represented in the study. Two pairs of faculty participants were from the same institution, however, their experiences and perspectives varied, as they taught different courses in different semesters, so all interviews were included in the study. Demographic data are presented in Table 2. All participating faculty were female and Caucasian.

The three-year average of NCLEX pass rates for the participating schools was 86%, higher than the 82.8% national average for associate degree programs (NCSBN, 2020). The three-year average retention rates were calculated for the schools represented in this study and were 81%, which is similar to the national average for associate degree programs at

73.61% (ACEN, 2017). All participating schools were accredited by the Accreditation Commission for Education in Nursing and approved by their state boards of nursing.

Table 2Sample Demographics (N=9)

		N	Percentage
Age			
	27 years to 40 years	4	44%
	50 years to 62 years	5	55%
Years as Registered Nurse			
	6 years to 12 years	2	22%
	13 years to 25 years	3	33%
	Over 25 years	4	44%
Level of Education			
	Master's Degree in	7	77%
	Nursing/Nursing Education		
	Doctoral Degree	2	22%
	(or in progress)		
Experience Teaching in			
Nursing Education			
-	4 years to 6 years	5	55%
	7 years to 10 years	1	11%
	Over 10 years	3	33%
Years at Current Institution	•		
	3 years to 5 years	7	77%
	6 years to 12 years	2	22%
Faculty to Student Ratio for	•		
Didactic Part of Program			
<u> </u>	1:12 to 1:15	6	66%
	1:16 to 1:25	3	33%

Participants chose whether they preferred to be interviewed via the Zoom platform or a telephone call since in-person interviews were not possible during the pandemic. Seven interviews were conducted via the Zoom platform with video enabled. Two interviews were conducted via a telephone call, and all interviews were audio recorded. The average length of the interview was 36 minutes with a range of 16-65 minutes. The pseudonyms chosen by participants were Boxer Girl (BG), Jessica, Jackie, Gail, Becky, Mary, Kelly, Gretchen, and Catherine.

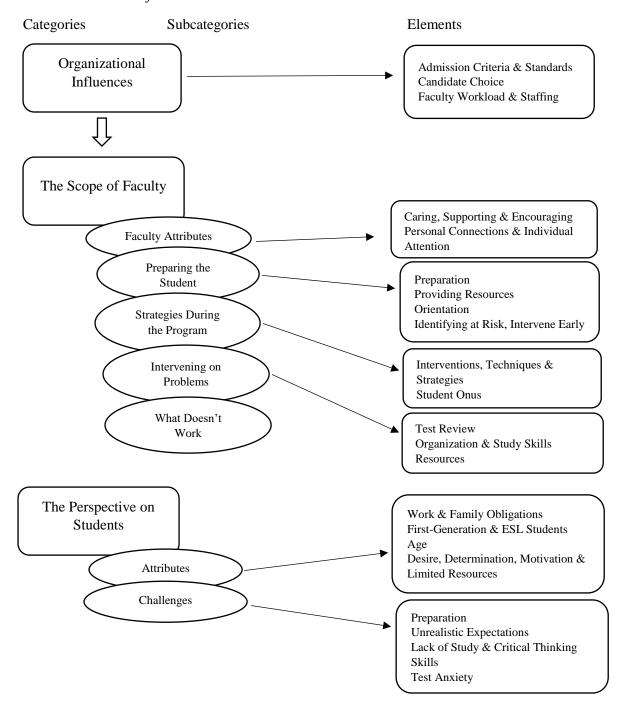
Specific information was sought related to participants' prior experience in other types of educational programs (aside from ADN), the types of courses taught, and the courses the participants were currently teaching. Three participants previously taught as adjunct clinical instructors in BSN programs, two participants taught in an LPN program, and one participant taught in a CNA/CMA program. Three faculty had not taught in other types of programs before the ADN program experience. Faculty participants had a variety of experience in their current ADN programs, teaching courses from the first to the final semester including Fundamentals (first semester), Medical-Surgical (throughout the program), Pharmacology, Leadership, Pediatrics, Mental Health, Gerontology, and Scope of Practice and Legal Issues.

Overall, faculty participants had a full range of experiences in teaching courses in multiple semesters of the associate degree nursing programs. Based on these experiences, faculty shared their strategies, perceptions, and recommendations for promoting nursing student retention. Participant quotes are provided throughout the results section and are coded by the faculty participant's chosen pseudonym.

Through content analysis, three main categories emerged. Category 1, *Organizational Influences*, describes administrative elements that affect the faculty's roles. Category 2, *The Scope of Faculty*, has five subcategories, *1) Faculty Attributes*, *2) Preparing the Student*, *3) Strategies During the Program*, *4) Intervening on Problems, and 5) What Doesn't Work*. This category describes faculty attributes, behaviors, and strategies. Category 3, *The Perspective on Students*, has two subcategories, *1) Attributes and 2) Challenges*. This category describes the faculty's view on the characteristics and challenges that affect student performance in school. Figure 1 displays the categories and subcategories with their elements.

Figure 1

Key Factors in Retention of ADN Students



Category 1: Organizational Influences

The first category, *Organizational Influences*, describes elements that influence faculty roles and strategies but are out of the faculty's control. These organizational-level decisions included admission criteria and standards, candidate choice, workload, and staffing. Many nursing programs utilize a shared governance model, where faculty serve on

committees and influence the decisions made for their programs. Ultimately, however, decision-making for these items occurs at an administrative level.

Admission Criteria and Standards

Faculty expressed that admissions criteria were often compromised, and students who fell below the criteria or admissions standards were accepted into the programs despite not meeting the admission criteria. "We've allowed some students to come in that were below the criteria, and we're really struggling with having our students be successful" (Becky). Participants stated they believed the organization's focus was on enrolling students and not on retaining students. "I think one of the barriers to our retention is the administration's desire to have the enrollment numbers and fill those seats, especially in the community college" (BG). Most schools used a point system for admission. When a natural break occurred between a set of students with higher points and a set of students with lower points, this break became the standard for admission. Therefore, the standard for admission was flexible. Sometimes even applicants with the highest points were lower than the standards set in the past. For example, one rural school experienced a recent decrease in applicants, so everyone who applied was admitted. Another participant reported that applicants to their school did not meet their admission criteria, so to enroll to capacity, admission standards were lowered. Even the schools with many applicants to the programs and long waitlists for admissions had problems with candidate choice due to competition with other nursing programs in the area.

Candidate Choice

Faculty often stated that their schools were not the top choice of potential students. For one school in a metropolitan area, there was competition with other four-year and two-year nursing programs. This faculty stated, "other schools might have a larger amount of faculty, great reputations, higher pass rates, innumerable resources, state-of-the-art labs" (BG). Some schools accepted students who had failed other nursing programs. Even when

applications exceeded acceptances, some of the schools could not be as selective as other schools might be, as expressed by Gretchen who stated, "We have 80 to 90 applicants, and there are definitely students that don't make it into our program but not that many. We don't have 1,000 applicants and we pick the top 16." Faculty stated that candidate choice affected retention, as many of their students struggled with the academic aspect of the nursing program, whereas other schools that could be more selective did not have this issue. One participant stated, "If they [students] have a higher ACT and critical thinking level they don't go to my school, even though it's in their backyard," and then described a conversation with a peer from a BSN program who stated that all of their students pass their program, "and I was like, 'Yeah. Your average ACT is a 30" (Jessica). The ACT national average score is 21, with Ivy League schools requiring a minimum score of 30 for admission consideration (American College Testing, 2021). In summary, faculty reported high achieving students did not choose to attend their programs, which left a pool of less-qualified applicants.

Faculty Workload & Staffing

Faculty workload is generally a calculated formula that involves either credit hours per semester, the number of courses taught per semester or the number of credit hours per academic year, but there is no universal definition of workload as it varies per school (Bittner & Bechtel, 2017). Although specific workload data were not collected in this study, faculty expressed having large workloads, which sometimes interfered with their ability to spend time with students to help them. Kelly stated, "sometimes we get so caught up in just going through the motions and trying to survive the semester that some students do get left behind." Gretchen stated, "I just have too many different tasks... as a faculty member feeling like I have too many roles and responsibilities. That's probably why I'm weaker maybe in reaching out to them for retention purposes." Faculty had multiple responsibilities and work outside of the classroom, such as committee participation, weekly learning sessions for students, and

sponsorship of student organizations. BG expressed frustration on being short-staffed, "we're down four faculty members, and yet the students are the same, the curriculum's the same, the workload's [the amount of work] the same." Faculty turnover and inexperience was another concern that faculty reported affected students and retention, as expressed by BG, "But how much better could it be for all the students and their grades and the retention, if we had the faculty, resources, and time that we need?"

All participants stated that although student retention was not part of the job description, it was assumed as part of their faculty role. Catherine stated, "We share that load, but it's still a big job, no one focuses solely on the advisor piece or the retention piece." Only one participant previously held a temporary, grant-funded retention-focused position and had received training at conferences for that role. The remaining eight participants did not have any training in student retention strategies.

Overall, the faculty reported that their participation and influence in the admissions process, workload and staffing were limited. Despite limited faculty input into these organizational decisions, these decisions impacted student retention and the ability of faculty to help students be successful. Although not officially part of their job descriptions, the faculty participants were significantly involved in helping students be successful and remain in school.

Category 2: The Scope of Faculty

The second category, *The Scope of Faculty*, encompassed the attributes and behaviors of faculty, as well as the strategies related to student retention they used throughout the program at their schools. This category has five subcategories: *1) Faculty Attributes*, *2) Preparing the Student*, *3) Strategies During the Program*, *4) Intervening on Problems*, and *5) What Doesn't Work*.

Faculty Attributes

Faculty attributes described how the individual viewed themselves as a person, i.e., their attitudes, characteristics, and behaviors. In this subcategory, faculty described how they cared, supported, and encouraged students. The faculty also described how they interacted with students as far as personal connections and individualized attention.

Caring, Supporting, and Encouraging

Faculty let students know they cared for them and their success. "Students feel like they're not just a number, they're actually cared about, we care about their success" (Mary). "Letting them know, 'I genuinely care about you. I genuinely care about your success; I'm not going to let you slip through the cracks'" (Kelly). Faculty genuinely wanted students to succeed, and many were available and accessible to students via email, in-person meetings, phone calls, and texting. The faculty said that having open communication with students and responding to student requests were important and showed support. "I let my students know that I am there for them, 100%. I'm going to do everything I can to help them" (Kelly). Some students felt no one cared for them, and faculty filled this role by building rapport with students, so students felt comfortable coming to the faculty and sharing their issues.

Encouraging students involved telling them they could do this, they were valuable, they were part of the nursing group and they belonged there. One faculty expressed the importance of remaining humble and giving students the benefit of the doubt.

Personal Connections and Individual Attention

Connecting with students on a personal level happened throughout the categories, as some faculty built connections and got to know students' personal lives as part of their natural interaction with students. This happened for other faculty after there was an issue with the student. "I've taken the time to find out something about them and to remember that. Students don't like it when you can't even remember their name" (BG). Two faculty expressed not having good professional boundaries with students, as they communicated with

them at various hours to help them personally with problems. Faculty discussed getting to know their students, understanding what is happening in their lives outside of school and learning their life situations and stories. "Sit down and chat with students about school and life in general" (Jackie).

Spending one-on-one time with students and providing individualized attention was important to most faculty. Kelly stated, "I only have 18 students, so I have the ability to really reach out to them individually, making sure they are staying on track and understanding things." Faculty stated that one-on-one meetings with students were beneficial, not only to learn about their lives and potential problems but to identify students' learning styles so faculty could better personalize their teaching. "Meeting with them frequently, looking at how they learn best.... just kind of individualized" (Gail). Individual meetings were important to review and clarify topics, provide study tips, and review testing which is discussed in upcoming subcategories. Faculty from schools with lower didactic faculty to student ratios reported that this helped them be more available to students and allowed for more individualized attention.

Preparing the Student

This subcategory describes what faculty do to help students as they start the nursing program. The faculty reported that some students were not prepared for the difficulty of nursing school and faculty needed to provide preparation, resources, orientation, and identify at-risk students early for intervention.

Preparation

The faculty reported that students were not prepared for the rigors of nursing school and that some students were not academically prepared. Most faculty participants said that nursing school is different from a regular college in that students were accustomed to memorizing information only during their pre-requisite courses. In the nursing program,

students needed more preparation for the difference between memorizing information and applying information. "I think that they're not prepared, when they come into nursing school, for how hard it is. They have no idea how to study or how to comprehend information and make it applicable" (Catherine). "This is going to be tough. This isn't going to be like any other college endeavor they've tried" (BG). "They weren't prepared for the time involved in it, the dedication to it" (Gail). Some students received poor college advising, and faculty would work with their main campus to ensure students were ready for the nursing program, "We worked with main campus to help with the advising process, to make sure that the students are prepared for the level that they need to be at when they come into nursing" (Catherine). Students who performed well in high school and their college pre-requisite courses often struggled academically when they entered the nursing program. "They have no concept of how to study. [The students often say] The teacher in high school just gave us a test review worksheet, everything was on it, so I just memorized it and then I got an A...I show up. I sit in the seat and I take notes. Where's my test review and why am I not getting an A in this?" (Jessica). Overall, faculty reported that students did not realize the different types of learning that would be required in nursing school.

Resources

Providing advising resources for students early in the program was important. "If we want our students to be successful, we've got to make sure that we help them from the beginning" (Becky). Two faculty stated that first-generation students (the first in their families to go to college) often needed basic support with understanding college processes and terminology. As one participant (Mary) stated, "my parents went to college. I knew those things. I grew up knowing those things, but we forget that our students don't always grow up knowing those processes." Students also needed financial resources, and faculty often helped students navigate scholarships. "Helping them financially is one of the biggest issues…we

help them find a way to help them with their books and stuff" (BG). At one school, the faculty contributed to a scholarship fund, and at another school students' NCLEX testing was funded as they found students were passing the program but unable to afford the licensure examination after graduation. Faculty also wondered if students received more financial support, students would not have to work as much, and this would improve retention. "Students need financial support, so they're not pinned in a corner" (BG). In summary, the faculty stated that academic and financial resources were necessary to support students.

Orientation

Scheduling a day for orientation was considered important, where students met their teachers, created accounts for their online academic resources, reviewed the calendar and schedule, and made sure logins and passwords worked for testing platforms. "We do an orientation day before school starts on the first year and second year. You get all your stuff, meet your teachers. You get your calendar set up, kind of figure out what's going on, and this has helped a lot" (Jessica). Another school had the college counseling services speak to students at orientation and distribute their contact information. One faculty stated that orientation was a time to set expectations, "I have put on my stern schoolmaster persona, from the very beginning, from the very first day of orientation, and made sure the expectations are specific, black and white, and clear" (BG). One school required that students complete a 16-week Introduction to Nursing course to prepare for the nursing program. One faculty identified that providing students early on with ideas for good, productive study groups would be beneficial as they often form on their own without guidance. Orientation was a separate event, before starting classes that provided additional supports to students.

Identifying at-Risk, Intervening Early

The faculty participants expressed that it was important to identify students who are at-risk and intervene early in the program. Students were mainly identified as at-risk after

failing the first exam. One school required weekly written assignments for clinical, and if a student failed one of these they were identified as at-risk. One faculty stated that her school would identify the at-risk students and then "meet with them regularly, at the beginning of the semester, mid-semester, and at the end to just kind of more closely watch them and see how their grades are and work with them" (Gretchen). "I think it was helpful to kind of catch students earlier until they were kind of in too much trouble to kind of swim out of it" (Mary). Overall faculty wanted to help students from the beginning. "Recognizing right off the bat the ones that you might have problems with and try to do interventions early on before it's too late" (Gretchen). "There is more we can be doing at the beginning to help students who are struggling, everyone just has such different learning styles and learning needs" (Catherine). Several schools have students identify their learning styles at the beginning of the program. One school had students read a book over learning styles, and other schools gave students learning style assessments. Most faculty reported that this was effective and helped students navigate the best ways for them to study, but one faculty expressed disbelief in the learning style theory but still encouraged students to try different ways of studying, "I've actually done some research into it and these learning styles that we're actually building our program on have been debunked...students ask do you think these things work? I don't give them my opinion, but I say, 'It doesn't matter. If you study something three different ways, you're probably going to get it, right?" (Becky) Overwhelmingly, faculty reported that identifying and intervening early on at-risk students was important.

Strategies During the Program

This subcategory describes interventions, techniques, and strategies that faculty use with students during the nursing program, while also depicting the element of student onus often expressed by faculty as impactful on student success and retention.

Interventions, Techniques, and Strategies

The faculty described various teaching techniques used to help students understand the material. One faculty participant helped students with guided readings, which involved creating questions for each chapter of reading to help students focus on what they needed to learn. Other faculty assigned case studies to help students apply content in preparation for exams. The faculty used engaging activities in the classroom such as role-playing and games. Several faculty participants spent time with critical thinking questions in class to stimulate engagement with content and demonstrate the thinking or rationale behind each question and answer choice. Faculty believed that students needed to learn analytically rather than by memorization, and overall believed straight lecture was not effective, rather that class time should be spent in activities. "I think not lecturing for three hours, trying to make it interesting, but trying to break up the different strategies for teaching within the class" (Gretchen). Two participants stated that it was important to share professional nursing stories and experiences with students to help connect theory and real-life situations. Two faculty implemented simulation in the classroom to bring content to life. Using a flipped classroom, simulation, and passion for teaching was considered important although one faculty expressed that "there's still a very big difference between how they apply this to a mannequin, and how they apply this to a real person" (Jackie). Another faculty took students from the classroom into the lab and stated, "I've really worked to get my students engaged and excited about what they're learning, bring them into the skills lab turn the mannequins on and show them what I'm talking about" (Catherine). Several participants expressed that clinical was an important opportunity to emphasize and solidify theory content. Clinical should not be an apprentice-like experience, where student nurses were training to be nurses. One participant stated, "clinical instructors feel like they're just basically doing on-the-job training for future nurses and we really wanted to do more of talking about care planning and trying to reemphasize whatever we're talking about in class" (Gretchen). Two faculty stated

that it would be helpful for students if faculty were more streamlined with their teaching and teaching styles, instead of teaching within silos. For instance, when one course or a semester's courses are taught by two or more faculty, students must figure out how they will study since one teacher may focus exam questions on material presented in class and another on the readings.

One school had a coaching program, where faculty were assigned with students who may or may not be in the same semester where the faculty was teaching. The coaching relationship was sustained throughout the program, and faculty were responsible for reaching out to their assigned students. Coaching provided a person that students could talk with about academic or personal issues. During the COVID-19 pandemic, virtual meetings between students and faculty coaches occurred. The faculty coaches provided study tips and test-taking strategies. Although the coaching relationship varied among faculty, most incorporated one-on-one meetings with students and functioned to "build rapport and make students feel comfortable to come to us when they aren't successful or were really very successful, and so we could celebrate" (Jackie).

As a personal strategy, two faculty members tutored students by meeting with them and clarifying and reviewing concepts. Another faculty expressed that students needed tutoring as a resource, but tutoring was not an available service to students. The student nurse association at one school provided peer tutoring to students however the organization no longer existed due to lack of faculty sponsorship.

Participants believed it was important to be available to students "We try to be available any time a student wants to come talk to us" (Gretchen). As a personal strategy, a faculty stated, "the main strategy is making yourself available to those who do have some need beyond what you're giving them in the classroom and in clinical" (BG). Other faculty expressed they were available to help students with skills in the lab, and generally having an

open demeanor where students would feel that the faculty were there for them. "I'm always very available to the students and I think they feel very comfortable talking to me" (Mary).

Overall, the faculty utilized multiple strategies in the classroom, lab, and clinical to engage and support student learning. Faculty believed in being available to students, whether as a coach, tutor, or for personal advisement.

Student Onus

Although participants reported that they employed strategies to help students, were supportive and available, faculty stated students were responsible for their learning and success. "I'm not saying it's because of us they fail. I'm putting it back on them," and says to students, "What do you think you could put in place to see that this doesn't continue?" (BG). The students should be taking the initiative and going to faculty, "They have to come to us too, it's not just us going to them" (Gretchen). Frustration was expressed by faculty as well, "We're working doubly hard to keep these students but there's a point when you have to say, 'You've got to take some responsibility on your own and do it" (Becky). One participant reported that some students do not make the effort needed to be successful. "They do the minimal. I don't see them going above and beyond. I mean, I would say your average student, it's hard to get—it's hard to get them to go above and beyond. And I think that some of them need to—they all need to do that" (Gretchen).

One faculty reported successful students are the ones who can adapt, be flexible, and take responsibility for their learning, ask for help when needed but "be confident enough to have a little bit of ambiguity and interpret it and do it for themselves and figure out their own methods of things instead of continuously going to instructors for help" (Catherine). Another faculty stated, "I don't feel 100% responsible if they don't get it from me. I don't take it personal. I'm like a blip of your nursing career. I want to teach them, but I also want to teach them that, you will be in charge of your license" (Jessica). The faculty recognized that

working with the students, getting their buy-in on any plans or strategies was vital to their success. "We make the plan together. It's not just me prescribing what they should do. It's us working together on it. If they don't agree with it, then I know they're not going to do it" (Becky). The faculty acknowledged that students needed to take part in their learning and were responsible for their success.

Intervening on Problems

This subcategory describes what faculty do when students begin to struggle in school, either by failing a test or a paper, missing assignments, or falling behind due to not understanding the content. Interventions included test review, providing organizational and study skills, and resources.

Test Review

A strategy overwhelmingly used by faculty was test review. All participants reported individually meeting with students if they failed a test, however, some faculty met with students after they failed two tests (not one), and some faculty met with students before their first test if the student was repeating the course. "When their class grade was low, or test mastery wasn't over an 80% is an automatic you come talk to me" (Mary). Another faculty reported that she told students "You don't have to wait until you've failed. If you're not happy with your test, come see me" (Becky). These individual meetings sometimes entailed examining the factors that may have influenced the student's performance. Several faculty participants completed a test analysis. This analysis assessed test-taking habits, such as frequent answer changes, misreading the questions, and time spent on each question. "Anyone who makes below our passing rate meets with me to discuss their thoughts" (BG). These test analyses also looked at what was going on in the student's life, such as if and how much they worked, family responsibilities, and any outside of school pressures they were under. However, the main advantage of a test review was to examine each question and

explore the student's thought process related to critical thinking abilities. "It's about their thought process while taking the test...test reviews help you see what they're not critically thinking" (Jessica). Follow-up after a test review session was also important for one faculty participant. After meeting with students because of a failed test, making a study plan, she then met after the second test to follow up with the student on the plan they had made together. "We look at everything we told them to do, did that work or not work, did you try anything different, has anything changed?" (Becky) This way, suggestions could be altered and tracked until a strategy that worked was found.

Whether completing a test analysis to identify personal issues that may be impacting student's academic performance or simply discussing this with students during a meeting, several faculty participants said that knowing and working with the student's situation was vital to helping them figure out a way to be successful. As one faculty described, "If they have a problem, I say 'We have to get personal or you're not going to make it...I ask what is it that holds you back? Time, laziness, motivation, children, a job? You have to get to that before you can get to any of the book stuff" (Jessica). One faculty discussed that it was important to remember that students fail, but their reasons will be different, "When I think about the students I've had that haven't been successful, it's not ever the same thing. And even if it's the same problem, it's a totally different way it's playing out for them" (Catherine).

Organization and Study Skills

Faculty helped students with organization skills and study habits. One faculty described what was called invasive tutoring which was used when a student was failing. The student would meet with the faculty and create a study plan that the student would carry and modify as needed throughout their program. Another faculty would write a schedule out with the student to help them organize when they would study. The faculty reported that a major reason that students failed was that they did not study enough. "If a person isn't doing well,

maybe it's just time to study" (Gail). "On my level they fail out because they're not testing correctly, not studying enough" (Becky). Referring to repeating students, one participant stated, "the ones that come back it's all on how much they're studying" (Becky). This faculty told students that they needed to study for four hours a day, whenever that can happen for the student, but was necessary to be successful (what this studying entailed was not specified). Another faculty stated that failing students acted as a reality check that they needed to study more, "I think sometimes failing them opens their eyes" (Gail).

Resources

Resources were provided to students when they failed a test or were falling behind. One school had a college-wide at-risk group that faculty could refer students to for advisement and obtain other resources. Another faculty stated, "our school gives a lot of resources to students to help them outside the classroom because they've got other barriers" (BG). Student success departments and counseling or psychiatric services were available at some schools, however, mostly faculty reported that they helped their students, instead of the main college advisers. One participant stated, "They don't always understand what nursing students—or nursing program is like, and so we kind of take care of our own in that way" (Mary). Faculty also found that students did not know how to use their academic resources and spent time reviewing these, "I think too many resources can almost be a detriment. There were so many that ended up not using them, or also the fact that they did not know how to use them" (Gretchen). Faculty also helped students get testing accommodations, as they found students struggled with test anxiety. This circumstance is discussed further in Category 3, The Perspective on Students. Faculty used a variety of methods when students began to fail in school including test reviews, providing organization and study tips, and resources (e.g., counseling, academic) when needed.

What Doesn't Work

This subcategory describes faculty behaviors or strategies that do not work in supporting or retaining students. Overall, the faculty expressed that negative behaviors towards students were detrimental. Some faculty reported that positive behaviors such as coaching, encouraging, and positive reinforcement did not always work or help, but they were still important to do since they believed these tools worked most of the time.

One faculty revealed that some simulations (lab experiences) in her school were traumatizing for students, and when students progressed to the semester she taught, they were terrified of participating in the simulation. She said that simulations should be more of a coaching experience rather than a graded or punitive one. Two faculty stated that anything punitive or intimidating was detrimental. These types of faculty behaviors would inhibit students from approaching faculty and seeking help.

Other faculty stated that acting in a degrading manner towards students was not an effective way to help them be successful as the message was "you're not worth my time" (Jessica). Assuming a student will continue the same path or pattern of failure was also ineffective, and faculty should point out to students that although this has been a pattern, they can change this, and it is not their fate.

"Nursing school's terrifying...it should be because you're taking care of a human life, but it's not our jobs to make it even more terrifying for them," (Kelly). This participant explained that even though the students may be adults, faculty needed to help them and treat them like a student, that students want to be helped. She further stated, "I have coworkers that say, 'It's not my job to remind them to turn in their exam. It's not my job to make sure—' But you know, it is our job [to remind them to turn in assignments]" (Kelly). Inflexibility was identified as a detrimental faculty behavior, that faculty who believed it was their way or no way left little room for growth and learning for students and faculty, setting a poor environment for learning.

Another strategy that did not work to retain students was lowering standards, particularly in the classroom. Two faculty discussed the importance of following the guidelines in their syllabi and testing standards. One example involved throwing out test questions on an exam to try and bring the scores up. One faculty stated that you cannot take shortcuts because of "being afraid of letting your students go" (Gretchen). Faculty need to keep their testing standards intact to ensure safe entry-level nurses were completing programs.

In summary, this category described the characteristics and behaviors of faculty as they interacted with students and the multiple strategies they used to help students be successful and retained in school. The element of student onus was also described as faculty reported that the student was ultimately responsible for their learning. Negative faculty behaviors did not contribute to retention.

Category 3: The Perspective on Students

The third category, *The Perspective on Students*, is the faculty's descriptions of the variety of attributes, responsibilities, and challenges their students have and face throughout their nursing programs that affect their ability to succeed. This category has two subcategories: *1) Attributes, and 2) Challenges*.

Attributes

Students had many different attributes in nursing programs. This subcategory describes the characteristics of students and the obligations they had that affected their performance in school, both positively and negatively. Attributes included work and family obligations, first-generation college students, English as Second Language (ESL), age, personal desire, motivation, determination, and limited resources.

Work and Family Obligations

The faculty reported that many students had work and family obligations that affected their ability to succeed in nursing school. Obligations outside of the classroom were a major barrier that students had, as many faculty participants reported students were non-traditional and had families and jobs. Some students worked full time while in school full time and did not have the time to study. One faculty stated, "students don't seem to agree that they either can or should do something about it, and that is the obligations they have outside the classroom. This is typical... it just—that doesn't fit. They will admit that they didn't have the time" (BG). Faculty examined students' obligations when they meet with them, particularly after they had failed an exam. "We look at their life... are extra time requirements going to be a problem, are there time requirements that will go away or choosing not to do them, are they able to financially, along with their family, decrease those work hours?" (Gretchen) Some schools were in economically disadvantaged areas and had students that could not decrease work hours. A student told the faculty, "I have to work, or my kids don't have food" (Jessica). Her response to students in this situation was, "Who am I to make that decision for you? I tell them, 'you cannot give nursing school 100% when you're a mom, and you're a wife, and you have three kids. I need you to give 75% because that's passing" (Jessica). The faculty recognized that many of their students were older than the traditional college student, but some faculty revealed the need for students to find a balance between their obligations and school. "We usually have a lot of adult learners that have jobs, they have the home and financial responsibility they need to work...they seem to have an attitude that they want the program to fit into their already existing life situation. And that's not going to work. It doesn't say in the syllabus that you'd have to meet these requirements unless you're taking care of a parent full time" (BG). Another faculty stated, "They're adult learners with families and jobs. Find a balance" (Becky).

First-Generation and ESL Students

Other attributes revealed by faculty were students who were first-generation college and/or ESL (English as Second Language) students. These students often struggled with navigating the college experience and did not receive support from their families. A participant stated, "A lot of them are first-generation college students... they don't often have that background or that support from their family" (Mary). One school was a Hispanic-serving institution, and faculty reported that some of these students needed extra supports and resources. Another program had ESL faculty that helped students. Several faculty participants stated that they would often meet with ESL students to clarify content as sometimes the English language translated to something different in their language. "I really think there's a slight cultural difference in, I think, the way questions, maybe, are worded. I think that might affect them" (Gretchen). Another faculty suggested opportunities for students to learn in their first language, "I think that would help with retention rates if they could study in their native tongue instead of English" (Catherine).

Age

Age was an attribute that participants perceived affected students' ability to perform in school. Part of this related to the obligations that non-traditional students had with jobs and families. One faculty noted that older students had more difficulty with the number of different courses, tasks, assignments, and resource utilization required, "there's so much extra: clinical and theory portion, care plans, ATI questions, check emails, announcements" (Jessica). Several faculty discussed the younger student, particularly concerning preparedness and lack of study skills. Also, younger students' expectations may not match the reality of nursing school, as one faculty stated, "The younger student says, 'that doesn't apply to me or 'I know you said that, but I can't work less than 40, 50, 60, whatever hours a week'" (BG). Younger students were more concerned about their time and schedule than older students and went to nursing school just to get it done and have a job. One faculty stated that since

younger students grew up with technology and cell phones, they had decreased attention spans and lacked communication skills.

Desire, Determination, Motivation, and Limited Resources

Personal desire, determination, and motivation were student attributes that positively influenced students' performance and success in school. Faculty reported that students often revealed their desires to become a nurse since childhood, or that becoming a nurse was their dream. Some students felt it was a calling and were passionate about helping people. "Most of them definitely do want to be nurses, they realize that they truly care for people and want to be in a job that's people-related" (Gretchen). Students had an intrinsic motivation to make a difference and have a positive impact on society. The faculty reported that students were very determined to achieve the goal of becoming a nurse, and despite lack of support or adverse occurrences, they persevered. "I will do whatever it takes" (Jessica).

However, sometimes students' determination to finish school was driven by the need to provide for their families and financially support themselves with a stable, reliable career. One faculty said that teaching in a low-income area altered her views on why students remained in nursing programs. She stated, "Before I worked here, I would have answered this question differently-- I would have said because they were studious, and they were eager to have a nursing degree and to be a nurse. Now after working in this area, I think it's because it is a way that they can financially provide for their families" (Kelly). Other faculty also stated that a stable career and income were a source of motivation for their students. Mostly, faculty stated these motivations were acceptable, "they do want to make good money. I mean, there's nothing wrong with that" (Gretchen). Students often had limited opportunities and resources. Sometimes the nursing program was the only feasible option for students for a career as stated by Catherine, "A lot of them grew up very, very poor. This is their home. They can't go

anywhere. They're supporting their families. And if it wasn't for this program, they would have never had the opportunity to go."

The faculty reported certain student characteristics affected success. These included work and family obligations, ESL, first-generation, and the personal desire and determination to become a nurse despite coming from environments with limited resources.

Challenges

This subcategory explores the challenges students faced during their programs that affected their performance. Faculty discussed the lack of preparation, unrealistic expectations, lack of study and critical thinking skills, and test anxiety that students often struggled with during their programs.

Preparation

Students often lacked the preparation to meet the academic challenge of nursing school. Students who excelled in high school or the pre-requisite college courses often learned by memorization and then struggled with the nursing program that emphasized application. Some students graduated from small rural schools where the academic competition was limited, as one faculty stated, "You go to this smaller school where you're like, 'I'm the salutatorian,' I'm like, 'Okay, well, that's great, but you don't even have a 19 ACT in all the categories... you're still not where you need to just go straight into this hard course work'" (Jessica). Another faculty reported that students may be coddled in early semesters of nursing school, and by the time they got to the final semester they were shocked by the difficulty, "I explain that this is unlike any other semester and that they're really going to have to study" (Gail). Students were also not prepared to retain content semester to semester, since nursing content tends to build off each semester. Students were accustomed to learning material for a course and then forgetting content once that course was completed. Students were not prepared for the time and dedication that nursing programs required.

Unrealistic Expectations

The faculty reported many students had unrealistic expectations of the nursing program. This was often the reason students left programs, particularly at the beginning, "On the freshman level, they realize within a month that it's really not what they want to do" (Becky). Students realized the nursing profession was not a good fit for them. Although one faculty did not experience many students who left because nursing was not a good fit, she stated, "I wish more of them would say, 'You know, you're right. This is not for me' because we can tell when it's not for them" (BG). Another faculty stated that students may be leaving programs prematurely, thinking nursing is not for them since they had only experienced clinical in the acute care setting, and they think that is all that nursing offers. Faculty participants relayed that students often felt overwhelmed, particularly at the beginning of the nursing program. They acknowledged that the programs were rigorous, time-consuming, and stressful.

Lack of Study and Critical Thinking Skills

The faculty discussed feelings of frustration when students struggled to think critically. One faculty stated, "The hardest part for me is the retention, where the students are just on the edge of actually being academically inclined and able to critically think... for whatever reason, it's not clicking" (Jessica). Another faculty told a story of spending a lot of time helping a particular student. A colleague told the faculty that she was wasting her time since the student would only memorize information and would not take the time to understand and learn the information. She stated, "Sometimes you can help people just enough to pass, and they're never going to pass the boards [NCLEX]" (Gail). "For me, that's the most frustrating-- they want to be a nurse. They want to be in healthcare. But they don't have what it takes to be a safe entry-level nurse and the critical thinking that entails" (Gretchen).

Test Anxiety

Faculty frequently reported students experienced test anxiety, and they often advised students to see a doctor or a counselor to address the problem. Some faculty made alternative testing arrangements to help students, as some schools had formal testing centers where students could be in a less populated environment and decrease distractions from other students. One faculty, as an informal strategy, separated students by fast and slow test-takers into two different rooms to help decrease anxiety. "When you see somebody doing poorly on a test, seeing if we would need to provide them a different type of atmosphere for testing" (Gretchen). Test anxiety was considered a serious problem that students needed to address, as stated by one faculty, "And all of the help in the world doesn't help them get through it because they have to learn how to adjust and work through that because, in the end, it's all about the test" (Catherine). Another faculty stated, "Testing anxiety is a big deal to stay in nursing school" (Jessica). At one school, a biofeedback technique was taught to students to help them relax before taking a test.

Overall, the faculty reported that students were unprepared and did not have realistic expectations of nursing school. Students struggled with critical thinking and test anxiety which affected performance.

Summary

The purpose of this qualitative descriptive study was to describe current nursing student retention practices from the perspective of faculty teaching in community college associate degree nursing programs located in the south-central United States. Aims of the study were to: a) describe current practices and faculty perspectives related to nursing student retention, and b) synthesize faculty recommendations for practices and strategies in student retention. The research questions were answered through the interviews conducted, and a summary is provided.

Research Question 1: How do faculty teaching in associate degree community college nursing programs describe current student retention practices?

This question was answered in Category 1, *Organizational Influences*, and in Category 2, *The Scope of Faculty*. Many faculty participants considered admissions criteria an important aspect of retention. Category 1, *Organizational Influences*, described admission criteria and standards, candidate choice, workload, staffing, and training. All faculty shared the responsibility of student retention, as no schools had faculty or staff specifically focused on nursing student retention. Only one faculty participant had received training in student retention. One faculty reported that the current retention strategies were great, while the other participants ranged in their opinions from helpful to effective to an extent, to need to do better. Two faculty expressed that more needed to be done to retain students at the beginning of programs, and another two expressed dissatisfaction with the admissions criteria and candidate selection having negative impacts on retention. One faculty stated that although her school's retention rates were increasing, their NCLEX pass rates were decreasing.

Faculty descriptions of current retention practices included the various strategies that faculty used either on their own or program-wide to support student success and retention.

Category 2, *The Scope of Faculty*, described the interactions with students at the beginning of the program, during the program, and when students were failing. Behaviors that supported and did not support student success and retention were also described. Strategies used by all faculty included individual attention or one-on-one meetings with students. Most faculty reviewed tests with students who failed and examined the student's outside obligations that may be impacting their performances. Faculty gave study tips and referrals to various resources. A summary of the retention practices that faculty reported is presented in Table 3.

Faculty utilized a variety of these practices and recommended these for faculty to use.

Table 3

- Provided resources (academic, counseling, financial)
- Oriented students to nursing program
- Identified at-risk students early
- Taught learning styles, organizational skills study and test-taking tips
- Created study plans with students
- Coaching and tutoring
- Reviewed tests
- Met with students individually
- Made personal connections with students
- Made themselves available to students (office hours, email, texting)
- Provided engaging learning activities
- Told students they cared for them
- Encouraged and supported students

Research Question 2: What are nursing faculty perceptions of current retention practices?

Category 1, Organizational Influences, and Category 3, The Perspective on Students answered this research question. Several faculty participants stated that accepting lower qualified students, lack of staff, and high workloads were faculty barriers to student retention, which was discussed in Category 1, Organizational Influences. Faculty perceptions of current retention practices included the barriers students faced, the resources students needed, and why students stayed or left nursing programs. These were described in Category 3, The Perspective on Students. Most faculty reported that outside obligations and lack of study and testing skills acted as barriers to student retention. Overall faculty stated that students needed financial resources, so they would not have to work as much and could focus on school. Students needed orientation, engaging learning opportunities, counseling services, and individual attention from faculty. Overall, students persisted in nursing programs due to their desire to help others and to have a stable career with a good income. Students left programs mainly because of academic failure.

Research Question 3: What are nursing faculty recommendations for retention practices?

Faculty recommendations for practice came from the first and second categories.

From Category 1, *Organizational Influences*, faculty recommended not lowering admissions criteria or standards, which sets students up for failure. Most recommendations came from Category 2, *The Scope of Faculty*, and were tied to their strategies the faculty reported worked in retaining students. Examples included getting to know students on a personal level, being available, telling and showing students you care, and encouraging them. Also recommended were in-depth test reviews, where faculty assessed student thinking and taught critical thinking to students. Several faculty participants recommended sharing stories of themselves and their profession as a motivation for students. Faculty reported that it was important to point out that they were also nurses, students were their future colleagues, and that students should be made to feel like they were part of the nursing group, that they belonged.

Chapter 5: Discussion

This chapter presents a summary of the study, a discussion of the findings, limitations, implications for nursing education, future research, and the study conclusions.

Faculty likely affect students' commitment to persist through their nursing programs as students have reported that their relationships with faculty affected their nursing school experience (Harrell & Reglin, 2018; Jeffreys, 2014; Taulbee, 2017; ten Hoeve et al., 2016; Wells, 2007). A gap was identified in the literature related to faculty perspectives on nursing student retention. The current and projected nursing shortage is affected by the number of graduating nurses (AACN, 2019). This study adds to the literature on strategies for increasing nursing student retention.

The purpose of this qualitative descriptive study was to describe nursing student retention practices from the perspective of faculty teaching in community college associate degree nursing programs located in the south-central United States. The study also had the aim of synthesizing faculty recommendations for practices and strategies in student retention.

The research questions were:

RQ1: How do faculty teaching in community college associate degree nursing programs describe current student retention practices?

RQ2: What are nursing faculty perceptions of current retention practices?

RQ3: What are nursing faculty recommendations for retention practices?

Nine associate degree community college nursing faculty were interviewed for this study. Seven participants held a master's degree, one had a Doctor of Nursing Practice (DNP) degree and another was in process of obtaining a DNP degree. The minimum amount of teaching experience was 4 years, with a maximum of 12 years, and the faculty had taught in a variety of courses and semesters. Most RN programs require a majority of faculty to hold a masters' degree as regulated by state boards of nursing. According to the 2020 NCSBN national workforce survey, 72.8% of nursing faculty have a masters' degree or higher

(Spector et al., 2020). One school was in an urban area, the remainder located in rural areas. Content analysis was completed to reveal three categories.

Discussion of Findings

All faculty participants were Caucasian women, which aligns with the demographic characteristics of nursing faculty in the U.S. In the NLN's (2019) faculty survey of all types of nursing programs, 82% of nursing faculty were Caucasian and 93% were women. The faculty perspectives in this study represent schools who had average retention rates and NCLEX pass rates above the national average.

Faculty perceptions on nursing student retention were gathered during interviews and reviewed using content analysis to reveal three categories: *Organizational Influences*, *The Scope of Faculty*, and *The Perspective on Students*. Seven sub-categories allowed for a further in-depth explanation of the categories.

The first category, *Organizational Influences*, described factors that influenced faculty yet often were outside of their roles and controlled by non-faculty. This category helped to answer research questions 2 and 3 (RQ2 and RQ3). Elements of this category included admissions criteria and standards, candidate choice, workload, and staffing.

The second category, *The Scope of Faculty*, helped to answer research questions 1 and 3 (RQ1 and RQ3) and described the behaviors of faculty (positive and negative), the strategies used to retain students, and the strategies faculty perceived did not help retain students. The five sub-categories described the scope of faculty throughout the stages of the nursing program, including their attributes.

The third category, *The Perspective on Students*, described the elements faculty thought influenced their students related to retention. This category helped answer research question 2 (RQ2). Two sub-categories described student characteristics and challenges they faced.

Category 1: Organizational Influences

Faculty perceptions of current retention practices and recommendations for practice included elements that influenced faculty's ability to retain and support students yet were outside of faculty control, or faculty were not part of the decision-making processes. These data helped create Category 1. Faculty described compromised admission criteria, poor candidate choice, heavy workloads, and short-staffing that affected their capabilities of retaining students. Only one faculty had training in retention. Retention practices were not part of any job description, yet the participants assumed it was part of their role.

Several faculty participants discussed the importance of not compromising admission criteria to increase enrollments in their programs and stated that their schools were often not the first choice of candidates. Admissions criteria for nursing schools vary, yet most use a deidentified system with admissions testing (Fontenot & McMurray, 2020). In this study, admission criteria also varied. All participating schools used a point system that ranked preadmission testing, general education, and pre-requisite course grades. Two schools gave points for taking pre-requisites at their school, one school awarded points for living in that county, and three schools gave points for healthcare work experience. One school required three professional references with associated points and an interview. An additional school differed significantly from the others as they required essay questions, a possible interview, an admissions test, and a minimum college GPA of 2.85. Overall, the required GPA from either high school or college was 2.5, and additional points were given for science course grades. It is unknown which criteria faculty believed were compromised, but no school had significantly higher requirements than other schools in this study. Overall GPA, science course grades, and admissions testing were correlated to success in the review of literature yet results from this study indicate that these criteria may be insufficient, particularly if the benchmark or required minimal criteria are compromised.

Boards of nursing and national accrediting agencies do not include admission criteria as part of the review/approval process. The most common metrics those agencies review are graduation rates, NCLEX pass rates, and employment rates, though graduation rates may provide an incentive to programs to increase selectivity for admission (Spector et al., 2018). In 2013, 103 out of 128 Texas pre-licensure nursing programs had NCLEX pass rates below the national benchmark of 80% and had to develop improvement plans. One of the identified areas of weakness from these programs was inadequate admissions criteria. Program directors reported that one of the improvements was to increase admission selection criteria to higher required GPAs, pre-admission testing scores, and identify at-risk students early in the program (Hooper & Ayars, 2017). One suggestion was to profile students on their learning needs before admission. Having admission policies that were not followed or making decisions on an individual case basis decreased the credibility for the stated standards. This was especially found when admitting students who did not meet admission criteria, due to pressure to enroll students to help alleviate the nursing shortage (Hooper & Ayars). Based on the faculty responses and the literature regarding nursing school admission processes and policies, a holistic admissions process should be explored. The holistic admissions process has four core principles. The first principle allows for admission criteria to be based on the school's mission and values and promotes diversity. The second principle uses the E-A-M anacronym for experiences, attributes, and academic metrics. These three areas are assessed, which allows for the unique characteristics of individuals to be highlighted, not just academic grades and test scores. The third principle focuses on how the potential student can contribute to the learning environment and the profession, and the fourth principle allows for race and ethnicity to be considered if in alignment with the school's mission and considered along with the other factors of academic metrics, experiences and attributes (AACN, 2016). Relying on a de-personalized admissions process with emphasize on grades and test scores

may not be an effective method to adequately screen potential students. The AACN (2021) recommends a holistic admissions process for nursing programs to better assess academic readiness and success as well as increasing diversity, yet many nursing programs do not use this process.

Several faculty participants reported being short-staffed and having heavy workloads. Short-staffing is a known trend as the U.S. has a nursing faculty shortage and projects a wave of retirements between 2020-2030 as the average age of a doctorate-prepared professor is 62.6 years, and the average age of a master's degree-prepared professor is 57.1 years (AACN, 2020). Fang et al. (2021) reported a faculty vacancy rate of 9.1% in their special report for the AACN, with a 7.2% vacancy rate in the southern U.S. which included the states in this study. Fang and colleagues also reported that 52% of schools had vacant full-time faculty positions. The NLN reported that associate-degree nursing programs had a vacancy rate of 28% (NLN, 2019). Short staffing contributes to heavier workloads, as there are fewer faculty to do the work, while student enrollment numbers usually remain the same. Other reasons faculty may experience heavy workloads include an increase in online or distance learning and pressure to increase enrollment to meet the needs of the nursing shortage (Waldrop & Chase, 2014). In another study, the leading disincentive for faculty to remain in their positions was an unmanageable workload (74.8%), and on the other spectrum, 80% of respondents reported that a reasonable workload was an incentive to stay in their positions. Workload included teaching and administrative responsibilities but was not further defined (Tourangeau et al., 2014). Additionally, one of the listed challenges for faculty recruitment was heavy workloads (Fang et al., 2021). As workload is not universally defined and varies among institutions, it is reasonable that faculty perceptions of workload will vary depending on their experience level and expectations. Based on the literature and this study's findings, workload needs further definition and should include additional duties apart from class, lab, and clinical time. Faculty reported spending a lot of individual time with students and participating on committees, which were not included in their calculated workload.

Nursing faculty often transition from the clinical setting with little preparation for academia. Orienting, training and mentoring faculty is vitally important to support faculty in teaching roles (Billings & Halstead, 2016). Nursing doctoral students and recent doctoral graduates, many of whom were in or entering faculty roles, recently stated that they were unprepared for this role (McNelis et al., 2019). Some of the doctoral programs did not include any or few education courses, leaving graduates unprepared for teaching. Doctoral programs that did include multiple education courses helped graduates feel prepared for their faculty roles (McNelis et al). Although faculty participants reported meeting with students individually, regularly, providing advisement on various levels, whether personal, test reviews, and/or study habits, faculty reported that they received no formal training in methods to help retain students, nor was this activity specifically included in their job descriptions. The need for faculty training regarding retention practices was identified as a need in a study by Gibbs (2018) and was represented in Wells' (2003) nursing retention model. Participants in Gibbs' (2018) study on faculty perceptions of nursing student retention in proprietary institutions stated that they received little to no training on student retention or practices to support students outside of the classroom. In Wells' (2003) model of primary, secondary, and tertiary attrition prevention, formal faculty training on retention and diversity was recommended as a primary intervention that might positively impact student retention, although no studies were found that have tested this aspect of the model. Faculty training in retention practices and inclusion of this focus in job descriptions would provide an objective expectation of this role.

Category 2: The Scope of Faculty

The faculty provided detailed descriptions of the strategies they used to support student success and retention throughout the programs. Category 2 was formed from these data and answered RQ 1 and RQ 3. Recommendations for practice are discussed in the section, *Implications for Nursing Education*. In this category, faculty also described their behaviors and interactions with students and discussed behaviors and strategies that do not help students. Different behaviors and actions were taken at various levels of the nursing program, such as at the beginning, throughout, and then what they did when students had a problem or failed. Five sub-categories emerged.

Faculty Attributes

Faculty reported caring for their students personally and about their success. They encouraged students and purposefully portrayed an open and approachable demeanor. Some faculty made efforts to get to know their students personally from the beginning of the program, while others focused on this after there was a problem when the student was struggling to succeed. The faculty stated it was important to spend individual time with students, although some were unable to meet with students as much as they wanted due to increased workloads.

Faculty support has been identified as influential to student success. Wells' (2003) nursing student retention model emphasized that faculty support had more influence on student success than academic variables. From a student perspective, multiple studies indicated that perceived support from faculty was influential on students' satisfaction and retention (Harrell & Reglin, 2018; Jeffreys' 2007; Shelton, 2012; Summers, 2020; & Taulbee 2017). Studies from faculty perspectives (from nursing and other college programs) showed individual time spent with students, being available, demonstrating caring behaviors, and developing a relationship or connection outside of the classroom were important for student success and retention (Baker, 2010; Gramas, 2013; Gibbs, 2018, & Zerquera et al. 2016). The

ethical principles for nursing education identified caring actions as essential for positive outcomes. Caring actions included open communication between faculty and students, intentional efforts to learn each other's needs, assisting with physical and psychological needs, and creating an environment of trust to foster curiosity and inquiry. Faculty should role model these caring behaviors and encourage caring relationships with students (NLN, 2012).

Preparing the Student

The faculty reported students were unprepared for the rigors of nursing school. Students were often successful in high school and pre-requisite courses but struggled with the academic rigor of the nursing program. Participants reported that because students previously were required to memorize information and were tested on this level, they were ill-prepared for nursing school where students must not only memorize information but apply information to situations, which requires a higher level of thinking. Students have reported that they did not have to study or work as hard in courses before nursing school, so their overall study habits were poor (Felicilda-Reynaldo et al., 2017). Providing resources to students at the start of nursing school was important, including academic and financial advising and counseling, as students often decided to leave during the first 6 weeks of the start of nursing school (Felicilda-Reynaldo et al., 2017; Jeffreys, 2012; & Pence, 2011). This study indicated that there was a disconnection between nursing faculty and the support services that colleges offered. Faculty reported taking care of their students for referrals. A solution to this disconnection might include meetings to help coordinate the relationship between a college's academic success/student resources staff and nursing faculty. This would have several benefits. Faculty would learn the various resources available, how to access them, and have a contact person for support and questions. Student confidence in seeking help from their

faculty may be increased when the faculty are well-versed in providing specific support services.

Faculty participants also believed providing an orientation program for students was helpful, whether it was a day of meeting teachers, learning how to use resources, or an introductory course. This was consistent with the literature that showed orientation workshops had a positive influence on nursing student retention in Practical Nursing, ADN, and BSN programs (Everett, 2020; Fontaine, 2014; Jacobs, 2016; Pritchard et al., 2016; & Walker, 2016). The faculty stated it was important to explain expectations and the rigors of the program although many faculty participants felt that students did not believe it or that the time and commitment would not apply to them. Students often underestimated the difficulties of a nursing program (Fagan & Coffey, 2019; Felicilda-Reynaldo et al., 2017; & Zerquera et al., 2016). Students may be used to minimal study efforts while still receiving good grades through high school and in college general education courses. These courses most likely do not build upon one another, nor require the application of concepts. Nursing courses not only require memorization of pathophysiology but application of the nursing process. For example, students will memorize information about pneumonia and the effects on the lungs yet caring for the patient experiencing oxygenation problems becomes more complex. Students must recognize a problem from the symptoms the patient is experiencing, develop a plan, implement a plan and evaluate the patient's response while adjusting their actions depending on the response. This type of thinking is often new to nursing students.

The faculty reported that it was important to identify at-risk students and intervene early. This was consistent with Wells' (2003) retention model which described identifying and intervening on at-risk students early in the secondary stage of prevention of attrition.

There should be an objective measure to identify at-risk students, students should be surveyed on their levels of satisfaction, and current school practices should be examined based on the

results of the surveys (Wells). The importance of identifying at-risk students and intervening early has been highlighted in the literature (Gibbs, 2018; Hopkins 2008; & Lockie & Burke, 1999). Faculty participants stated that one way to assist students at the beginning of the program was to help them identify their learning styles, which would then direct students on how to best study and learn content. Fagan and Coffey (2020) stated that identifying and using learning styles was one of the 5 habits of successful nursing students. Catering learning materials to students' particular style was part of student success workshops and individual meetings with faculty (Kruse et al., 2020; & Vinales, 2015).

Strategies During the Program

Faculty described the various strategies they used to help students throughout the program, which included test-taking tips, examining and refining study habits, and individual meetings to review content. In Gibbs' (2018) study, nursing faculty often provided review sessions. Nursing faculty spent additional time with students individually, teaching study skills and habits (Felicilda-Reynaldo et al., 2017).

One faculty participant discussed the coaching program used at her school, and the individual tutoring she did as a personal strategy. This program-wide practice of coaching was only found at one school. The faculty believed that it was very beneficial to students and increased retention. Literature on faculty coaching is sparse. McKelvey et al. (2018) implemented a faculty coaching program with students who were predicted to fail the NCLEX (from normed assessments done in the program). Faculty volunteered to be coaches for 6 weeks after the students had graduated. Faculty and students developed contracts that addressed their schedule, hours spent studying, and provided individual study sessions. Students practiced and reviewed NCLEX-style questions with faculty. Students completed an increasing number of questions until they were answering 265 questions in a session. Results showed 7 of the 8 students passed the NCLEX the first time and improved their school's pass

rate from 78% to 90% (McKelvey et al.). In a dissertation study, the investigator explored BSN student perceptions, NCLEX readiness, and NCLEX pass rates after participating in a faculty coaching program that was implemented between HESI exit one and exit two exams in the final semester of nursing school (Brown-O'Hara, 2013). This 8-week coaching program involved faculty meeting with students either 1:1 or 1:2 to review NCLEX-style questions, teaching test-taking skills, study habits, and time management tips, setting goals, and providing referrals as needed to other resources. Results showed statistically significant increases on the second exit exam from the first, though NCLEX pass rates were undetermined as the study did not achieve statistical power with its small sample size. This coaching program was mandatory, as students were assigned a coach if they scored less than 850 on the first exit exam. Students expressed dissatisfaction with the mandatory requirement because they were already very busy, and they wanted to be able to choose their coach (Brown-O'Hara). Since faculty already spend time with students outside of the classroom, implementing a formalized coaching program would be a good way to strengthen the facultystudent relationship and model the nursing profession. Faculty would need training on how to be an effective coach, as certain behaviors and actions are necessary to facilitate this relationship. Faculty should be warm, supportive, empathetic, optimistic, and avoid judgmental behaviors (Hayes & Kalimakis, 2007). Specific strategies for faculty would include identifying students' strengths and weaknesses, learning styles, developing short and long-term goals with students, making plans of improvement, giving feedback, motivating students, and celebrating successes (Donner & Wheeler, 2009; & Hayes & Kalimakis, 2007).

In the classroom, faculty created engaging activities that enhanced critical thinking, such as case studies, review questions, and concept mapping, often in a flipped classroom style. Case studies were a way of storytelling and promoted critical thinking abilities (Chan, 2013; Green & Schlairet, 2017). Several participants believed in sharing their personal and

professional experiences to enhance student engagement in the profession of nursing which aligned with the Professional Integration aspect of Jeffreys' NURS Model (2012). Helping students envision their role as a nurse helped students persist to reach their goals (Williams, 2010). Although the flipped classroom was engaging and promoted critical thinking, students reported missing out on professional stories and experiences from faculty in a study by Green and Schlairet (2017). Students felt these stories helped them envision their future role as nurses, although they found the flipped classroom style more interesting than lecture.

Although faculty felt they did many things to help students, they also felt that students were responsible for their learning, and that failure was due to student issues, not faculty issues. The faculty acknowledged that they had to work with students on study plans instead of dictating to students what they should do, but that students often did not follow their instructions. This was similar to findings from Zerquera et al. (2016) where some faculty felt that students did not want to make the needed effort or take time to study and student deficiencies were the reasons for failure. Faculty expected that students must categorize their time and responsibilities outside of the classroom to be successful (Zerquera et al.). Faculty participants expressed that students wanted to fit nursing school into their already busy lives without making changes and acknowledged that this often did not work.

Intervening on Problems

When students failed a test, missed assignments, or showed that they were falling behind, the faculty intervened. The major intervention was having a test review after an examination failure where faculty met with students individually to review the questions and the students' thinking process. Faculty reported that this helped identify problems with test-taking and assessed students' critical thinking. Test review is considered an important part of nursing education, as part of a student's learning process (Evans et al., 2014). Reviews are similar to a debriefing session, where the thinking process is examined closely for each

question and answer choice, and confusing information can be clarified (Potter & Tolson, 2019).

Often part of the test review process was an assessment of students' life situations and the effects on their studying and ability to do school work. Mostly, participants informally discussed life situations with students, while two participants used a tool developed by their programs to collect this information along with test-taking and study habits to come up with a plan to help students. Using a tool to help guide faculty in identifying the various elements affecting student performance may be a useful way to formalize planning and contracting with students. An example from the literature was the development of the GROWTH (Growth, Readiness, Opportunity, Work, Time management and Habits) tool (Lewis et al., 2019). This tool contained open-ended questions that students completed before meeting with faculty. The questions addressed psychosocial, affective, and environmental influences on students. Lewis and colleagues did not correlate the tool with retention but reported high satisfaction from both faculty and students and emphasized a caring relationship (Lewis et al.).

Faculty participants worked with students to help them get organized, create study schedules, and ensure students knew how to use their academic resources. Academic resources were online activities and assignments that students competed, and students often had multiple software platforms. These activities under the direction of faculty were consistently found as useful in the literature (Guy et al., 2018; Lewis et al., 2019; & Tharani et al., 2017). Nursing programs should implement formal assessments to examine the elements and practices of at-risk students, such as study habits, test-taking habits, and personal issues which can assist faculty and students in creating a performance improvement plan together.

What Doesn't Work

Faculty participants described negative faculty behaviors that did not contribute to student success or help with retention. These included demeaning, degrading, condescending, and intimidating behaviors towards students. Incivility can occur amongst faculty, students, between students, and between faculty and students. Faculty incivility towards students is detrimental, adds increased pressure to perform, increases overall stress, decreases satisfaction, lowers retention, and is contrary to the caring concept essential to the nursing profession (Aul, 2017; Clark & Springer, 2010; & Lasiter & Marchiondo, 2012). Faculty should engage with students in a respectful and collegial manner and emphasize positive faculty-student relationships (Billings & Halstead, 2016).

Two faculty participants reported that lowering classroom exam standards were not helpful, since students might pass the course but then fail the licensure exam. One participant revealed that exam questions might be dropped from an exam with the intent to raise scores, and another participant discussed the risk of being overly lenient on syllabus standards. Evaluation of student performance is best done with clear instructions and objective measurement, such as a rubric, to ensure students are learning (Billings & Halstead, 2016). Discussion of lowering standards for an individual student or a class to assist students in passing was not found in the literature. Further exploration of this potential practice among nursing faculty may provide insights into retention rates compared to NCLEX pass rates in nursing programs.

Category 3: The Perspective on Students

Opinions related to retention strategies contributed to this category and answered RQ2, as faculty shared their perceptions on the characteristics of students that affected their ability to be successful. Challenges students faced were also identified, and two subcategories emerged.

Attributes

Faculty reported that student performance was affected by a variety of student attributes such as age, ESL, first-generation student, obligations outside of the classroom, personal desire, determination, motivation, and limited resources.

Some participants stated that younger students were unprepared for nursing school, had unrealistic expectations, and lacked study and communication skills. Younger students were considered those who proceeded directly from high school to college and tended to be in their early 20s. These younger students are likely part of Generation Z who grew up with a focus on technology, and this may create a disconnect between them and their faculty (Billings & Halstead, 2016). The preferred learning styles and needs of this generation in nursing school are just beginning to be studied, but in a recent study, Generation Z nursing students had shorter attention spans and more difficulty learning critical thinking skills than previous generations of nursing students (Hampton et al., 2019). This generation has experienced social interaction via social media, which may impact communication skills.

Students who did not proceed directly from high school into college but spent years working or raising a family were considered older students by faculty. The faculty reported that older students had outside obligations that distracted them from nursing school. This type of student is considered non-traditional and was included in Jeffreys' (2014), Shelton's (2012), and Wells' (2003) nursing retention models, highlighting that these students had different needs and required different retention strategies than the younger student. Some of these needs included childcare, tutoring, and options to attend school part-time (Billings & Halstead, 2016).

Students who were ESL or first-generation often needed additional advising or resources. The faculty felt that ESL students should have the opportunity to study in their first/primary language. These students faced extra challenges because nursing curricula include medical terminology and require strong communication skills, and they often

experienced isolation (Choi, 2018). Additional resources, such as faculty mentoring, and increased teaching of test-taking strategies, critical thinking skills, and medical terminology were recommended (Choi, 2018; Onovo, 2019; Pool et al., 2019).

The faculty identified that first-generation students needed help navigating the college processes. First-generation students did not have someone at home to help them understand the college environment which is vastly different and more autonomous than high school (Billings & Halstead, 2016).

Work and family obligations were identified as a major barrier that students often would not or could not change. Jeffreys' (2007) study cited the most restrictive variables influencing nursing student attrition were financial and family obligations. Work and family obligations were identified as influential when Tinto (1993) added them into his student retention model, and these elements were included in the three nursing retention models discussed in this study.

Faculty perceived that students' desire, motivation, and determination to persist through school and become a nurse had positive impacts the students' ability to be successful. Faculty reported that some students desired to make a difference and be a part of a caring profession, while other students were motivated by a stable career and good income, and sometimes both. In many rural areas, students had limited resources, and the nursing program was the main opportunity to advance themselves and support their families. A theme consistently identified in the literature is that the desire, determination and motivation to become a nurse contributes to persistence in nursing programs (Glogowska et al., 2007; Hopkins, 2008; Jeffreys, 2014; Shelton, 2012; Wells, 2003; & Wray et al., 2014).

Challenges

The faculty expressed that students faced multiple challenges in nursing school.

These included lack of preparation, unrealistic expectations, lack of study and critical

thinking skills, and test anxiety. Most faculty participants taught at rural schools. In rural schools, the problem with lack of academic preparation and unrealistic expectations were accentuated because students may have been at the top of their class in high school, but the challenge of nursing school's critical thinking demands left them unprepared (Metcalfe & Neubrander, 2016).

Participants reported that some students had unrealistic expectations of what nursing is, and left the programs shortly after starting, realizing the profession was not a good fit for them. Students have reported that their idea of nursing before starting a program did not match the reality once they started, because they thought nursing involved more skills versus academics, and this was often a reason for attrition (Chan et al., 2019; Glossop, 2001; & O'Donnell, 2011). These findings suggest an opportunity for admission screening or interviews to help clarify student understanding of the nursing profession.

Test anxiety had a big impact on student success according to faculty. Referring students to counseling or doctors and allowing students to test in a formal accommodated environment (a testing center) was important. Having students conquer this anxiety was not only important to pass nursing school but important to prepare them for the licensure exam. At one school, students learned biofeedback to help reduce anxiety before and during a test. Nursing students tended to be under a great amount of stress due to the rigors of the curriculum, outside obligations, and long study hours. This created chronic stress and depressive behaviors, which led to increased test anxiety, requiring faculty referrals for stress-reducing measures (Augner, 2015; & Beggs et al., 2011).

Limitations

The limitations of this study included a homogenous sample, geographic limitations, the COVID-19 pandemic, and lack of experience of the student researcher. The participants were recruited via email invitation, and interviews were arranged with those who responded.

The respondents and subsequent participants were all Caucasian females. According to the NLN (2017), nursing faculty are 80.8% Caucasian and 93.2% female, so this study's participants are somewhat representative of nursing faculty. Future studies should strive for a more diverse faculty sample.

A second limitation of the study was that all schools except one were in rural communities. The intent of the study was to focus on community college associate degree programs in the southcentral U.S., so it was expected that many of these schools would be rurally located. However, the results disproportionally represent rural perspectives.

The COVID-19 pandemic required virtual interviews and no opportunity for observation at school sites. Although the Zoom platform provided personal connections, inperson observations of interactions between faculty and students may have provided additional insights for this study.

The inexperience of the student researcher was another limitation of the study. To address this, the student researcher conducted two practice interviews with nursing faculty, and the findings from these practice interviews were not included in the study. These practice interviews were beneficial in refining the flow of the interview questions and process.

Implications for Nursing Education

Recommendations for Practice

One of the aims of this study was to synthesize faculty recommendations for practices and strategies in student retention. Research question 3 (RQ3) answered this aim and came from Category 1 *Organizational Influences*, and Category 2, *The Scope of Faculty*. Faculty had both personal and program strategies they recommended other faculty use and had recommendations of what not to do.

Holistic Admissions

Admissions criteria and policies should be refined and include faculty in the process, as the literature and this study indicate that lowering standards may detrimentally effect student retention. Faculty reported that students were set up for failure since they were starting school below the requirements for admission. A holistic admissions process should be implemented as this has multiple benefits. Prospective students can be screened to identify their learning and resource needs, so a plan to support them can be initiated quickly once starting the program. The rigors of nursing school and a portrayal of the nursing profession can be described and clarified to potential students to help avoid attrition from students realizing nursing is not a good fit. Holistic admissions would also allow increased diversity of the student body, which will increase diversity in the nursing workforce.

Faculty Training and Orientation

Nursing faculty require training and an orientation process. Many new faculty enter academia from clinical careers, and according to the literature and this study's findings, faculty are not adequately trained and prepared for their academic roles, much less in retention practices. Eight of the nine faculty participants in this study had no training in retention practices, which is not unusual. Most retention plans, initiatives, and strategies are done by a small group of staff that are not nursing faculty (Everett, 2020). Study participants agreed that retention was an assumed and shared faculty responsibility. As the faculty-student relationship is important to student success and faculty already share and assume the responsibility, retention training should be provided to all faculty members. It is not enough for one faculty member or a college advisement group to implement these strategies. This training can be done in a faculty orientation program. Strategies should include creating an environment of inclusion and diversity, where students are encouraged to share their experiences and thoughts, intentionally portraying an approachable and caring attitude to build positive and trusting relationships with students, being available and encouraging office

visits, working with retention and support services available at the college and being the liaison between students and these services, helping students set goals, and addressing non-academic variables that may be affecting students such as work, family, and confidence (Everett).

Formal Coaching Program

Faculty participants recommended getting to know students and their personal stories. This would facilitate understanding and show students that the faculty care and support them. Faculty should verbalize to students that they care for their success and encourage them. Being available to students for content review, test review, skills practice or just to talk was important. This would best be done with a formal coaching program with faculty training that includes test-taking and study tips, test review tips, time management and organization skills, giving feedback in a positive, supportive and non-judgmental manner, and setting goals with students. Faculty can use the coaching opportunity to model professional behavior, as faculty recommended the sharing of self and the nursing profession. In other words, faculty perceived that when they shared personal stories or their own nursing stories they were modeling the profession, which not only engaged students but helped students feel part of the profession they were learning about and growing into as future colleagues.

The definition and the activities included in faculty workload need examination. As this study and the literature showed, workload is not universally defined and the faculty perspectives on workload are vague, but faculty indicate that they participate in activities that are not calculated into workload. Faculty participation in a holistic admissions process and formal coaching program would need to be included in job descriptions and in workload.

Considerations for Future Research

Multiple areas for future research emerged from this study. Once a training or orientation program for faculty that includes how to provide test-taking and study tips, test

review tips, time management and organization skills, goal-setting with students, giving feedback in a positive, supportive and non-judgmental manner, and modeling professional behavior is implemented, studies to assess satisfaction and effects on retention rates will be needed. As reports of faculty coaching programs are scant in the literature, studies on formalized coaching programs in nursing education are needed. Although McKelvey's (2018) study on a faculty coaching program showed an increase in NCLEX pass rates from 78% to 90% because of faculty interactions with students, such as creating schedules, providing individual study sessions, and practicing NCLEX style questions, more studies are needed. Coaching could be studied with effects on retention, and faculty and student satisfaction. One intervention from the study had students practicing NCLEX-style questions, building up to 265 in a session, which implies increased stamina for attention. Perhaps nursing students are accustomed to exams that are 50-100 questions in their programs, and unprepared for the stamina sometimes required for a longer test as the NCLEX might be for some students. This is another area of potential research.

Studies examining learning styles and generational impacts between Generation Z and faculty are needed. In a study by Hampton et al. (2019), Generation Z did not prefer the flipped learning classroom, as they reported lecture with response clickers as the most engaging and most effective for their learning followed by straight lecture. The flipped classroom has been promoted in nursing education as beneficial. This indicates that understanding the characteristics of the generation one is teaching is important. Teaching towards a generation's characteristics and preferences promoted learning and future respect while working in diverse environments (Billings & Halstead, 2016).

As faculty participants cited that their schools were often not the first choice of candidates, research with potential nursing students' processes for choosing their programs may help nursing programs cater and recruit more effectively. Continued research on

admissions criteria is also important, particularly since the criteria are varied and not standardized, even within states (Fontenot & McMurray, 2020).

In the Lewis et al. (2019) study, the GROWTH tool was implemented in a nursing program, and results showed that the tool effectively formalized meetings between faculty and students and facilitated the development of action plans with students. Studies are needed using this tool for effects on retention and NCLEX pass rates.

Faculty perspectives on nursing student retention could be further studied with more ethnically diverse faculty and with male faculty participants to more fully identify strategies and recommendations for practice. Also, inclusion of nursing programs in urban locations may reveal different student needs that may require alternate retention strategies.

Conclusion

Nursing student retention for community college associate degree programs remains a challenge for faculty and schools. The results of this qualitative descriptive study add to the literature on nursing student retention and can help faculty with strategies to assist their students in being successful, remaining in, and graduating from nursing programs. Current retention practices were shared by faculty, perceptions of the practices which included faculty perceptions of student attributes and challenges were provided, and practice recommendations were given.

This study's findings provided detailed strategies used by faculty to help their students be successful and retained in programs. Highlighted was the significance of the faculty relationship with students, making a personal connection, and being available for individual meetings. Students faced multiple challenges during their programs, and faculty felt that positive, encouraging, supportive, and caring behaviors were important for their success. It is essential, however, to train faculty on retention strategies, as many faculty

participants stated that retention was an assumed part of their role yet received no guidance or instruction on the best practices of retention.

Also highlighted was the connection between admission processes and retention. The faculty reported that admission criteria were compromised, and their schools were not the top choice of candidates. Admission criteria varied by school, yet it was mainly impersonal, as most of the schools used a de-personalized points system, which does not allow for extensive admission screening. The AACN (2021) recommends a holistic admission process, which would include interviews and/or interactive sessions with students allowing faculty to assess and possibly identify at-risk students before admission. Holistic admissions would allow more opportunity to diversify the student body which would, in turn, diversify the nursing workforce which is essential to health equity (AACN, 2019). Obstacles to this holistic process would be faculty availability to participate as this would be more time-consuming and add more responsibility. However, as a retention strategy prior to entering the nursing program, the holistic admissions process may prove to increase retention rates.

Community colleges are an affordable and flexible option for people to become nurses in the Southcentral U.S. Nurses who graduate from community college associate degree programs comprise 39% of the nursing workforce (AACC, 2017). Community college nursing programs are the predominate educational institutions in underserved and rural areas, and their nursing graduates often stay and work in these locations. Retaining students in community college nursing programs can increase the nursing workforce, while also helping to meet nursing shortages in rural communities. Faculty perspectives from this study provided useful insights into retaining students.

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Appendices

Appendix A: Invitation Letter

Dear Dean/Director (Name),

I am a nurse educator and doctoral candidate at the University of Kansas School of

Nursing. I am currently in the process of collecting data for my dissertation related to faculty

perceptions of nursing student retention in prelicensure community college associate degree

nursing programs. I am requesting your assistance in this study, to invite some of your faculty

to participate in this study. I am attaching a flyer with my contact information as well as

information about the study and am requesting your assistance in posting this flyer to help

attract potential participants.

Student perspectives and characteristics thought to affect retention have been widely

studied, yet the faculty perspective has only recently been identified as a relevant/influential

factor in student retention, including current retention practices and recommendations for

practice, study findings will add to literature on student retention.

I hope that you will agree to assist me in recruiting potential participants. Thank you

for your time.

Sincerely,

Lauri Jones, MS, RN, CCRN

PhD Nursing Student, University of Kansas School of Nursing

(918) 261-1668

ljones23@kumc.edu

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Appendix B: Participant Recruitment Flyer

Seeking Faculty for Research Study about Nursing Student Retention

Study Title: FACULTY PERCEPTIONS OF NURSING STUDENT RETENTION IN COMMUNITY COLLEGE ASSOCIATE DEGREE PROGRAMS: A QUALITATIVE DESCRIPTIVE STUDY

Purpose: To describe current nursing student retention practices at various prelicensure community college associate degree nursing programs in the south-central U.S., from the perspective of nursing faculty.

Eligibility Criteria: Nursing faculty members who have at least 2 years of full-time teaching experience in prelicensure programs and are currently teaching in ADN programs.

Participation commitment: 45 minutes to one hour for an in-person interview about nursing student retention.

Consent: There are no personal risks or benefits to your participation in this study, and participation is completely voluntary. You can stop participating at any time. No identifiable information will be collected about you, and interviews will be confidential.

For more information or to participate please contact Lauri Jones, MS, RN, CCRN University of Kansas School of Nursing Doctoral Student Email: ljones23@kumc.edu Telephone (918) 261-1668

Appendix C: Human Subjects Committee Approval

Human Research Protection Program

APPROVAL OF SUBMISSION July 1, 2020 Cynthia Teel CTEEL@kumc.edu

Dear Cynthia Teel:

On 7/1/2020, the IRB reviewed the following submission:

Type of Review:	Initial Study
Reviewing IRB:	IRB00000161
FWA#:	00003411
IRB#:	STUDY00145822
Title:	Faculty Perceptions of Nursing Student Retention in
	Community College Associate Degree Programs: A
	Qualitative Descriptive Study
Investigator:	Cynthia Teel
IRB ID:	STUDY00145822
Funding:	None
Expedited Category(ies):	None
Documents submitted for	Jones_Demographic Sheet_IRB.docx
the above review:	•Jones_Recruitment Flyer_IRB_6_10_20.docx
	• Jones_Interview Guide_IRB.docx
	• Jones_Survey consent form - no HIPAA.docx
	• Jones_Flexibility Request for Flexible IRB Review
	6_4_20.doc
	• Jones_Research Protocol_6_10_20.doc
	• Jones_Invitation Letter_IRB_6_10_20.docx
	Letter of Revisions
Special Determinations:	None

The IRB approved the study from 7/1/2020.

Your approved documents are stored in the "Documents" tab for this study in the eCompliance system. The IRB stamped consent form(s) can be found under the "Final" column on the right side of the screen. These are the **only** valid versions for documenting informed consent.

Mail-Stop 1032, 3901 Rainbow Blvd., Kansas City, KS 66160 Phone: (913) 588-1240 Fax: (913) 588-5771 humansubjects@kumc.edu

Appendix D: Interview Guide

Tell me about your teaching experience:

How long have you been teaching ADN students?

Have you taught in other types of programs?

What kind of courses have you taught and are currently teaching?

RQ1: How do faculty teaching in associate degree community college nursing programs

describe current student retention practices?

What are some strategies used in your institution to retain nursing students?

What are your opinions of the current retention practices at your institution?

Are there teachers or employees in the nursing program who are dedicated to or focus primarily on retention? If so, what do they do?

RQ2: What are faculty perceptions of current retention practices?

What are barriers to retention?

What resources do you think students need?

Why do you think students stay in nursing programs?

Why do you think students leave nursing programs?

RQ3: What are faculty recommendations for retention practices?

What are some retention strategies that work?

What are some retention strategies that have not worked?

What are some personal strategies that you have used?

What retention practices or strategies would you recommend faculty use to help with student retention?

Appendix E: Consent Form

Faculty Perceptions of Nursing Student Retention in Community College Associate Degree Programs: A Qualitative Descriptive Study

Lauri Jones <u>Ljones23@kumc.edu</u> (918) 261-1668

Dear Participant,

I am Lauri Jones, a School of Nursing doctoral student, who is conducting a study at the University of Kansas Medical Center on faculty perceptions of nursing student retention. I am contacting you because you are a nursing faculty member at a community college. I am recruiting research participants to help me describe current nursing student retention practices from the perspective of faculty teaching in community college associate degree nursing programs located in the south-central United States. Participation involves completing a virtual interview that will take about 45 minutes. No identifiable information will be collected about you. In addition to the interview questions, I will request information about your age, gender, ethnicity, years as a registered nurse, education, years employed in nursing education and at your institution, number of students taught per semester, faculty/student ratio, and your institutions' student retention and NCLEX pass rates.

There are no personal benefits or risks to participating in this study. Participation is voluntary, and you can stop the interview at any time.

If you have any questions, please contact Lauri Jones at <u>ljones23@kumc.edu</u>. For information or questions about the rights of research participants, you may contact the KUMC Institutional Review Board (IRB) at (913) 588-1240 or <u>humansubjects@kumc.edu</u>

Sincerely,

Lauri Jones, MS, RN, CCRN

(918) 261-1668

Ljones23@kumc.edu

Appendix F: Demographic Sheet

Faculty Participants

Please provide the following information about yourself. The information you provide will be confidential and will be known only to the research team conducting this study. Information collected will be reported in aggregate and used to describe the research sample population only.

1. Age in years
2. Gender
3. Ethnicity
4. Years licensed as a registered nurse
5. Highest degree earned in nursing
6. Years employed in nursing education
7. Years employed at this institution
8. How many students do you currently teach per semester?
9. What is your faculty/student ratio?
10. What is the nursing program's retention rate?
11. What are the program's NCLEX pass rates?

Appendix G: Reflexivity Matrix

Within the Field of In the Overall Social Space Within Everything That is **Specialists** Linked to Membership of the Scholastic Universe Cell 1 Pre-Cell 2 Cell 3 Research How do researchers' broader Where does the researcher's What is the relationship between the researcher and the interests (and conflicts of motivations affect the reason to health care field? How is the conduct research in the first interest) lie within the place, the choice of topic and choice of topic relevant to relevant literature and its research question, and the choice health care? interpretations? of methodology? I am biased in that I work at a There is a lot of literature My motivation for choice of topic community college, with on student retention, comes from being a community nursing students. I might not however most studies are college professor and care about the issue as much if from student perspectives, wondering/being curious about I worked at a university. I feel surveys, exam scores, how can I best help these students these students are different, grades, etc. I am interested succeed and become nurses? The facing challenges that many of in exploring the faculty creative writer in me is very the traditional four-year perspective since the attracted to qualitative nursing student may not face, literature shows that description where I am and believe they need supports students' relationship with in place to help them succeed. examining language and their faculty is very meaning, finding categories and My assumption is that these impactful. related information to hopefully supports are different than the create insights. university student. Since community college nursing programs still produce almost half of the RN workforce, I believe studying retention among them is important. Data Cell 4 Cell 5 Cell 6 Collection What are the shared and Do the researcher and Are questions or prompts divergent understandings participants share the same inadvertently shaped by between the researcher and language, especially if they popular (perhaps fleeting) participants with regard to come from different health scholarly opinion? research generally and to the disciplines? Are there any I don't think any of the health-related topic? Are there power differentials between the questions or prompts are any differences of a social nature, researcher and participant, shaped by fleeting or for example, gender, education, based on positions held popular scholarly opinion, or experience? To what extent are (present or past), health as nursing student retention meanings negotiated between the discipline, or education? has been an ongoing issue researcher and participants, and as addressed in earlier column. for decades. Also, I am how is this influenced by life I don't see any power examining retention experiences? Is the researcher differentials. Instead there is an practices—some of the prepared to undergo change as a immediate comradery and answers may be influenced

exchange of information and

experience. Although we share

language and many processes

for example test review and going over each question to

thinking—I know and do this

process—so hopefully I am not

leaving anything out or making

correct. The interviewees have

assess how students are

assumptions that are not

my current same education

by current popular opinion,

but not the questions or

prompts.

result of his or her interaction

potential for change in the

I did not personally go to a

participant?

with the research? What of the

community college, and I had the on-campus college experience,

though I attended nursing school

resident. As a faculty colleague

interviewing other faculty, I find

there are shared meanings and

vocabulary—I may not ask for

later at a university as a non-

clarification on certain things because I know what they are. Some of my questions off script are for me to understand because the context in my head is what we do at my school. During interviews, I have discovered I may agree too much or offer a judgment like "that's good" in response to something they say. The interviews are already uncovering areas that I have not thought of or noticed the importance of. My population is very homogenous, all female, Caucasian, between 30-60 years of age, which mimics myself, so I'm not finding a lot of diversity. I feel I would change as an educator by understanding these issues and potentially creating strategies to address them.

level, only one has a higher degree.

Data Analysis

I need to remain aware that what I may want to hear, or what might fit into solutions already conceived may not be what is said by participants. I am careful to not omit analyses that don't fit, but instead investigate all data and consider alternatives.

Cell 7

How does the researcher's experience with the field shape analysis? Are some data dismissed as being commonplace, whereas they might warrant deeper interrogation? To what extent does the researcher consider the balance of analytical authority to rest with the participant or with the researcher? While writing the results, I found that there were times I did not explain things because they were common to me as a faculty, such as "workload." One idea that I found difficult to explain was the difference between nursing school and regular college. I used participant quotes as much as possible here to help capture that meaning.

Cell 8

How does the researcher moderate any drive for outcomes that might inadvertently lead to data omissions or fabrications? This is a topic that will change with every generation, so factors affecting retention or success will change. This will always be a challenge for colleges.

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