

NEW STUDENT ORIENTATION AND FIRST YEAR RETENTION RATE  
OF ASSOCIATE DEGREE NURSING STUDENTS

by

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## ABSTRACT

This study was conducted to explore the relationship between a program-specific orientation program for associate degree nursing students and first semester course grades, retention, and persistence to graduation. Previous research of orientation programs for associate degree nursing students has proved inconclusive in promoting student success. A significant difference was identified in first semester course grades between the orientation and no orientation groups, with the orientation group having an average lower course grade. The potential for confounding variables was discussed. There were no significant differences found in the relationship between orientation participation and first-year retention rates or orientation participation and persistence to graduation. Data analysis also determined that student age did not influence the prediction of first-year retention rates for students who did or did not participate in the orientation program. The results of this study suggest that there is no relationship between a program-specific orientation program for associate degree nursing students and their first-year retention and persistence rates.

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## CHAPTER 1 INTRODUCTION

### Background of the Study

“Orientation is a community-building experience for the campus; new students should feel a sense of connection and commitment to the campus after participating in an orientation program” (Robinson, Burns, & Gaw, 1996, p. 55). Orientation is a common method used by institutions of higher education to improve student retention and academic achievement (Cuseo, 1997). Institutions of higher education have utilized orientations as a way to disseminate information, prepare students for the expectations of college, and encourage them to be involved in the academic and social culture of college. The primary impetus for student orientation has been to improve student performance (grade point average [GPA]), increase retention rates, and improve graduation rates (Booker, 2006; Busby, Gammel, & Jeffcoat, 2002; Daniels, 2013; Pascarella, Terezini, & Wolfle, 1986).

Baccalaureate nursing programs have also found success in using student orientation programs to improve student retention, graduation rates, and licensure passing rates (Courage & Godbey, 1992; Gilmore & Lyons, 2012; Hansen, Clark, McCleish, & Hogan, 2009; Igbo et al., 2011; Melillo, Dowling, Abdallah, Findeisen, & Knight, 2013; Sutherland, Hamilton, & Goodman, 2007; Tower, Walker, Wilson, Watson, & Tronoff, 2015). In the workforce, nursing employers have a history of using orientation to assist new nursing graduates with the transition into professional nursing (Doody, Touhy, & Deasy, 2012; Kidd & Sturt, 1995; Penprase, 2012; Salera-Vierira, 2009). However, there

has been minimal orientation research for associate degree nursing students (Fontaine, 2014; Rateau, 2001). This dissertation contributes to orientation research by evaluating an orientation program and its effects on first year retention rates of associate degree nursing students.

### Statement of the Problem

Nursing education throughout the country has increasingly faced the problem of not having enough seats to meet the number of qualified applicants. In 2012, 84% of associate degree programs and 64% of Bachelor of Science degree nursing programs turned away qualified applicants (National League for Nursing, 2013b). Unfortunately, according to the American Association of Colleges of Nursing [AACN] (2014), the number of nursing school enrollments combined with the current graduation rates were expected to leave a 30% shortage of nurses in the United States in the near future.

As illustrated in Table 1, the Accreditation Commission for Education in Nursing (ACEN) reported that approximately 79% of baccalaureate nursing students and 74% of associate degree nursing students graduated within 150% of the time of the stated program length (ACEN, 2013). These graduation rates remained virtually unchanged from the five previous years. Nursing graduation rates far exceed the national college graduation rates for four-year institutions and for two-year institutions as displayed in Table 1 (National Center for Educational Statistics [NCES], 2015a).

Table 1

*Graduation Rates Within 150% of Normal Completion Time: Associate and Bachelor Degree Nursing Students Compared to General College Students*

General College Associate Degree <sup>b</sup>	Associate Degree Nursing <sup>a</sup>	General College Bachelor Degree <sup>b</sup>	Bachelor Degree Nursing <sup>a</sup>
31%	74%	60%	79%

<sup>a</sup>Adapted from “2013 Annual Report to Constituents”, by the Accreditation Commission for Education in Nursing, 2013. <sup>b</sup>Adapted from “Institutional Retention and Graduation Rates for Undergraduate Students”, National Center for Education Statistics, 2015.

First-year retention rates have been more challenging to measure in that there has been no standardized benchmark in the field that would compare to the NCES definition of retention, because many nursing students are outside of the first-time college student criteria (Robertson, Canary, Orr, Herberg, & Rutledge, 2010). Literature in the nursing education field has focused on retention strategies, but there is a “lack of standardization of terms and measurement processes used and [a] lack of national nursing standards” (Robertson et al., 2010, p. 100). This presents a challenge when trying to compare first-year retention rates of nursing students to those for other populations of students. The state of Florida requires all nursing programs to report annually on student performance through the Florida Legislature’s Office of Program Policy Analysis and Government Accountability (OPPAGA). One of the reported measures is the retention rate defined as “whether students persist in or complete their education program a year later” (OPPAGA, 2015, p. 6). Although OPPAGA’s term, retention rate, differs from that of NCES, the OPPAGA measure has been used to provide a frame of reference of the one-year retention rates of nursing students in the state of Florida. As shown in Table 2, one-year

retention rates for associate degree nursing students in Florida have continually declined over the last few years, but one-year retention rates of bachelor degree nursing programs have fluctuated near 90% during the same time period. The decline in the associate degree one-year retention rate is concerning, because 52% of the nursing program enrollments in 2013-14 were in associate degree programs compared to 15% of enrollments in bachelor degree programs (OPPAGA, 2015). The remaining 33% of nursing student enrollments were in transition, bridge, or second-degree nursing programs.

Table 2

*Florida One-year Retention Rates for Associate and Bachelor Degree Nursing Students*

Year	Associate Degree Program	Bachelor Degree Program
2014	78.5%	89.4%
2013	81.6%	93.2%
2012	85.0%	93.0%
2011	85.0%	87.0%

*Note.* Adapted from The Florida Legislature Office of Program Policy Analysis and Government Accountability (OPPAGA), 2015.

In 2013, the Bureau of Labor Statistics projected that registered nurses (RN) were expected to be one of the top occupational jobs in terms of growth through 2022. With new positions and replacements, the United States was projected to need approximately one million new RNs by 2022. With 45% of RNs pursuing their degrees at a community college nationally (U.S. Department of Health and Human Services Health Resources and

Services Administration, 2010), it is imperative that these institutions maximize student retention.

The projected shortage of nurses and the decline of first-year retention rates of associate degree nursing students makes it even more important for nursing programs to support the success of first-year students, because there are qualified students who are not admitted each year. Nursing programs need to invest in the students who are admitted with the goal of providing them with the resources they need to be successful in the program and to become members of the nursing profession. Orientation has been a successful way to assist other students in their transition into college (Mack, 2010).

Associate degree nurse educators must identify ways to increase student retention. With the success of orientation programs with other groups of students, including baccalaureate-level nursing students (Condon et al., 2013; Courage & Godbey, 1992; Gilmore & Lyons, 2012; Golde, 2000; Hansen et al., 2009; Igbo et al., 2001; Melillo et al., 2013; Sutherland et al., 2007), orientation programs may be one practice that could be implemented to improve retention and graduation rates in associate degree nursing programs. This dissertation contributes to orientation research by determining if an orientation program could be a valuable tool in increasing first-year retention rates of associate degree nursing students.

### Significance of the Study

Graduation rates for nursing students at the associate and bachelor degree levels are higher than the general college population (Table 1), but one-year retention rates for

associated degree nursing students in Florida have been declining over the last few years (Table 2). If students can be successful in their first year of nursing school, there is a better chance they will successfully graduate from their nursing programs. Nurse educators need to focus their efforts on retaining students during their first year in the nursing program.

Although there are many examples in the literature of how the implementation of program-specific orientations improves student retention in baccalaureate-level nursing programs (Condon et al., 2013; Courage & Godbey, 1992; Gilmore & Lyons, 2012; Golde, 2000; Hansen et al., 2009; Igbo et al., 2001; Melillo et al., 2013; Sutherland et al., 2007), there has been a lack of research to determine the effect of program-specific orientations on student retention in associate degree nursing programs (Fontaine, 2014; Rateau, 2001). This dissertation has been designed to determine if orientation programs should be considered in the retention and persistence efforts of associate degree nursing students. If a program-specific orientation increases the academic performance and retention rate of associate degree nursing students, it can be valued as a best practices option to increase the number of graduates in these programs.

### Theoretical Framework

Many orientation programs have been based on the theoretical work of researchers such as Tinto, Bean, Bandura, and Chickering and Gamson (Booker, 2006; Courage & Godbey, 1992; Fowler & Boylan, 2010; Hansen, Clark, McCleish, & Hogan, 2009; Sherman, 2013). The use of these different theoretical frameworks indicates that

orientation programs influence the student's ability to meet the academic expectations as well as the student's integration into the social environment of the institution (Pascarella et al., 1986). In this dissertation, the researcher viewed orientation through the lens of the theory of work role transition. This theoretical framework framed students' journeys as they began their transition into the new environment of college and, more specifically, nursing school.

The theory of work role transition framework has historically been used to describe the transition employees experience when they change employers or change positions within the same company (Nicholson, 1984). The transition forces individuals to internalize the attitudes, behaviors, skills, and expectations required of the new role in order to be successful. Internalization occurs through personal motivation, using prior experiences to facilitate the transition, and the individual's willingness to actively participate in and be influenced by the new organizational socialization practices (Nicholson, 1984).

Although nursing students are college students, the nursing program requires attitudes, behaviors, skills, and expectations that may be different from students outside of the program (Jeffreys, 2004). The new roles for nursing students require that they draw on previous experience, current instruction, and modeling of others to meet the requirements of the program, and ultimately the profession. New student orientation is an ideal way to initiate students into their new role as a student nurse.

The theory of work role transition has been applied to nursing student transition in the United Kingdom. West and Rushton (1989) found that mismatches between the low



discretion environment of nursing education and student personalities that desire role innovation without personal changes creates adjustment challenges expressed as frustration and attrition. West and Rushton utilized student questionnaires and comments to provide a link between student experiences and the work-role transition process.

This dissertation evaluated the implementation of a program-specific orientation as the initial step in the work-role transition process and how it correlates to grades, retention, and graduation to measure student success in the work-role transition process. Based on previous research findings through a literature review, this theoretical framework can be used to view orientation as a practice to assist students as they move from the role of college student to the student nurse role. This theoretical framework is expanded upon in Chapter 2.

### Research Questions

The dissertation was guided by the following research questions that address the work-role transition process of associate degree nursing students:

1. What is the mean difference in first semester final grades between students who participated in the orientation program and those students who did not participate in the orientation program?
2. What is the association between participation in a program-specific orientation program and the first-year retention rate of newly admitted associate degree nursing students?

3. Can the first-year retention rate of newly admitted associate degree nursing students be predicted by participation in a program-specific orientation program and the age of the student (traditional and adult)?
4. What is the association between participation in a program-specific orientation program and the persistence to graduation of newly admitted associate degree nursing students?

The use of first semester grades, first-year retention rate, and graduation rate are being used to measure the student's successful navigation through the transition process from college student to student nurse to graduate nurse. The program-specific orientation program signifies the initial experience in the transition process.

#### Definitions of Terms

For the purpose of the dissertation, the following terms are defined.

*Adult learner:* A student over 25 years of age (Jeffreys, 2004; NCES, n.d.). Both sources identify non-traditional students as those over 25 years of age. Other factors are also included in the term, non-traditional, that is included in the dissertation. For that reason, the use of the term, adult learner, is used to identify students by age.

*Associate degree program:* A program that requires at least two, but less than four, years of full-time equivalent course work to complete (NCES, n.d.).

*Bachelor degree program:* A program that requires at least four, but no more than five, years of full-time equivalent course work to complete (NCES, n.d.).

*Graduation rate:* Percentage of students who complete their degree within 150% of the time of the stated program length (NCES, n.d.).

*Nursing students:* Students enrolled in an associate degree nursing program.

*Program-specific orientation:* An orientation that is designed for a specific group of students based on their plan of study in order to facilitate their transition into the program.

*Retention or retention rate:*

A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall. (NCES, n.d.)

### Summary

Higher education personnel have become more aware of and accountable for student retention and graduation rates, and faculty and administrators have identified and implemented initiatives that have demonstrated success in improving student retention and persistence. Orientation programs have proven to be one effective method of increasing retention (Cuseo, 1997). Baccalaureate-level nurse educators have also

successfully implemented orientation programs to increase retention, graduation, and licensure pass rates of their students. The dissertation advances the literature by determining if a program-specific orientation program increases the retention rate of associate degree nursing students.

## CHAPTER 2 LITERATURE REVIEW

### Introduction

Freshmen orientation programs have historically been implemented to promote student success as measured by retention, program or degree completion, and academic performance (Cuseo, 1997). Upcraft and Farnsworth (1984) defined orientation as “any effort on the part of the institution to help entering students make the transition from their previous environment to the collegiate environment and to enhance success in college” (p. 27). Traditionally, the academy has familiarized itself with student orientation programs conducted primarily by the division of student affairs (Rentz, 1988). However, researchers have reiterated the positive student learning outcomes when these programs are incorporated into specific academic programs such as nursing (Golde, 2000; Courage & Godbey, 1992). The expansion of orientation to the academic affairs divisions in higher education settings with specific populations of students has continued to promote these same measures. The success of orientation at many institutions has been due to the commitment and collaboration of multiple divisions and offices across campus (Robinson et al., 1996; Shaffer, 1962). By utilizing the best resources across campus, institutions are able to harness the knowledge that can make orientation and, thus, student success a vested interest of the entire campus community. This chapter contains a review of the history of orientation programs in higher education, the use of orientation programs for general undergraduate students, and the use of program-specific retention efforts in nursing programs.

### History of Orientation Programs in Higher Education

The history of orientation programs began in the 17<sup>th</sup> century when senior students assisted new students in their transition to Harvard, the oldest higher education institution in the United States (Rentz, 1988; Strumpf & Sharer, 1993). These first orientations included peer support systems as well as initiations to the institution that reflected the social culture of the institution more than a strong academic culture (Rentz, 1988; Strumpf & Sharer, 1993). In the 19<sup>th</sup> century, faculty assumed responsibility for orienting new students to the academic community (Strumpf & Sharer, 1993). With the college population boom after World War II, institutions had to adapt their orientations to meet the needs of a growing and a more diverse student population (Courage & Godbey, 1992; Strumpf & Sharer, 1993). “Orientation programs have evolved from their roots of individualized faculty attention to programs that attempt to focus on a multitude of important issues while meeting the needs of a diverse student population” (Strumpf & Sharer, 1993, p. 38).

In the 1950s, administrators questioned the value of orientation programs (Rentz, 1988). In 1960, the American Council on Education defined orientation as the practice of initiating students “into the community of learners” (Rentz, 1988, p. 208). Caple (1964) stressed the need for the evaluation of orientation programs to confirm that the programs were providing the guidance needed for new college students. He identified four areas that should be the basis of all orientation courses. First, orientations should provide entering college students with the tools needed to adjust to their new environment. Part of the adjustment is gaining an understanding of the history, organization, and purpose of

the institution. If students' goals do not align with the institution's purpose, there could be a disjointed person-environment fit that could lead to dropping out. The second area was learning. Individuals should learn their roles as students and understand the role of the faculty in their learning process. Students should also learn and understand that they must be active participants in the learning process. The third area was personal and extra-curricular living which was designed to encourage students to be involved in the classroom as well as with their peer group outside of class. The orientation course should encourage students to explore how the relationship between social and academic activities can aid in their college success. The final factor, self-evaluation, encouraged students to discover and accept their real selves. Self-evaluation can be accomplished through reflecting on their strengths and challenges, their level of self-efficacy, the ways they have overcome challenges to be successful in the past, and identifying how their goals and motivation align with their peers (Caple, 1964). Although these areas were outlined prior to Tinto's (1975) and Bandura's (1977) initial research on retention and self-efficacy, they provided support for the development of the theoretical models that have continued to be the basis of orientation programs for over 50 years (Dannells, 1993).

Research findings in the 1970s validated the idea that there was a relationship between orientation programs and student satisfaction, institutional fit, and student retention (Rentz, 1988). As enrollments declined in the early 1980s, orientation was seen as a way to recruit and retain students. This period solidified orientation programs as a valued component of enrollment management and student retention programs (Kramer & Washburn, 1983). Content changed from orienting students to their academic community

to topics on academic achievement, the addition of vocational exploration and goals, and the incorporation of program development models that allowed for tailoring of content based on student needs (Rentz, 1988). Orientation programs in the 21st century “set the tone for a new student’s college experience, and successful programs have been linked to student retention” (Mullendore, 2014, p. 7). Successful orientation programs strive to identify student needs and provide programs that help students navigate the academic and social expectations of their new environment (Mullendore, 2014).

### *Content of Orientation Programs*

Orientation programs have varied in their emphasis, but many of them have strived to acquaint students with the opportunities available to them on campus and with the campus itself (Howe & Perry, 1978). Prior to the mid-1970s, all entering students attended the same general orientation program that explained registration and institutional expectations (Rentz, 1988). In the mid-1970s, administrators turned to a more formalized approach based on the increasing diversity of the student body and the fact that different student groups had unique needs.

Over the history of orientations, the content has changed from haphazard and fun to a focused introduction to the institution (Strumpf & Sharer, 1993). It was not until the 1980s that institutions saw orientations as a retention resource for students (Strumpf & Sharer, 1993). One of the earliest formalized orientation programs was the freshman seminar class which was developed because institutions noted that students needed help transitioning from high school to the college environment (Strumpf & Sharer, 1993).



Institutions used historical information to develop orientation courses and programs that varied in their implementation but had the same goal of improving student retention and persistence and educating students about the “general purpose and role of higher education in American culture” (Rentz, 1988, p. 204).

Coll and VonSeggern (1991) suggested that precollege orientation programs should provide students with: (a) a descriptions of program offerings; (b) the college's expectations for students; (c) information about assistance and services for examining interests, values, and abilities; (d) encouragement to establish working relationships with faculty; (e) information about services that help with adjustment to college; and (f) financial aid information. Some two-year college orientation programs have also included assessment, advising, and registration in order to provide students with a convenient setting to complete their enrollment process (Cook & Stearns, 1993).

The need for a more formal orientation structure prompted professionals to develop orientation based on models of program development such as “goal setting, the identification of clientele, assessment of student needs and the selection of appropriate intervention strategies” (Rentz, 1988, p. 217). Orientation organizers also used strategic planning concepts such as, the *Orientation Director's Manual* and the Council for the Advancement of Standards' (CAS) *Standards and Guidelines for Student Services/Development Programs* to develop programs that would support student success. The CAS document recommended that orientations have two goals: “an introduction to both the academic and student life aspects of the institution; and structured opportunities for the interaction of new students, faculty, staff, and continuing students” (CAS, 1986, p.

97). Both of these goals align with the recommendations in several theories of student retention.

### *When and How Orientation Programs are Offered*

Orientation programs vary as to when they are offered to students, to which group of students they are offered, and the length of time for which they are scheduled. The most effective length for an orientation has been and continues to be debated (Mack, 2010; Rentz, 1988). The length of orientations appears to be dependent on desired outcomes and resources. Some believe orientation should be one or two days while others believe it should continue through the freshmen year; yet others believe in an orientation program that continues until graduation in order to support students' developmental processes (Rentz, 1988). There are two programmatic emphases in the history of orientation: orientation day and orientation course (Rentz, 1988). Orientation day started at Boston University in 1888 and focused on the student's individual transition to college (Rentz, 1988). These early orientation days, and later the week model, failed to introduce students to the expectations of specific academic programs or to higher education in general (Rentz, 1988). Freshmen orientation courses, such as College Life at Reed College, expanded the objectives of orientation to a full semester course for college credit (Rentz, 1988). The orientation course was quickly implemented at several colleges and universities as a way to introduce students to the services and resources on campus, academic success techniques, and social opportunities on campus (Rentz, 1988). Changes in the types of programs were typically a reflection of the

perceived purpose of higher education, the intrinsic value system of the institution, or in reaction to specific events in society (Rentz, 1988). The student landscape has also been a factor in the changes made to orientation programs (Rentz, 1988). Changes in student demographics that influenced changes in orientation programs are discussed later in this chapter.

When an orientation program is offered has also varied by institution. Some orientations began prior to students starting their college experience (Chandler, 1972; Kimmel, 2000; Poirier, Santanello, & Gupchup, 2007), during the first semester of college (Altman, Musselman, & Curry, 2010; Beran, 1996; Wischusen, Wischusen, & Pomarico, 2011), or throughout the first year of their college studies (Courage & Godbey, 1992; Green & Miller, 1998; Smith, 2010; Turner, 2013).

According to Rentz (1988), there were three types of orientation programs: the freshman day or week model, the freshman course model, and the preregistration model. The freshman day or week model has gained and lost popularity over the last 90 years. The model includes distributing information, testing, advising and registration, and social events. The freshman course model became popular in the 1940s due to pressure from the faculty to change the focus of orientation to the academic issues faced by students. The preregistration model provided new students a few days on campus and allowed faculty to focus on the needs of freshmen (Rentz, 1988). The preregistration model included two content areas that have been incorporated into many orientation programs. The microcosmic content focused on the “testing, campus tours, informational meetings, and pre-registration activities” (Rentz, 1988, p. 215), and the macrocosmic content

included “the intellectual challenges of academic life, cognitive development and the emission of higher education” (Rentz, 1988, p. 215). One of the challenges of orientation research is that there is little in the literature that identifies which time format has been most effective (Titley, 1985). The decision of time format is typically determined by an individual institution’s goals, needs, and budget. No matter which time format an institution implements, it should meet the needs of the students at that particular institution (Titley, 1985).

#### *Cost and Responsibility of Orientation Programs*

Other considerations for orientation programs are the cost and responsibility of the program (Cook & Stearns, 1993). The cost can be funded through matriculation fees, private funding, or student fees. It is important for institutions to determine initial costs and how the program can be sustained. Institutions must also decide who will be responsible for the orientation program. Sharer and Strumpf (1993) found that most two-year institutions placed orientation within the responsibilities of the advising/counseling office, as most two-year institutions did not have an established orientation team or office.

Although the responsibility of orientation has typically been housed in student affairs, there are many people who benefit from a successful orientation program. Titley (1985) determined that students, their parents, the faculty, student affairs, and the institution all benefitted from orientation programs. Students gained self-efficacy and confidence by interacting with peers, faculty, and staff. Parents were able to understand

their role as a support system for their students and gained a better understanding of the expectations of students. Faculty welcomed students into their classrooms who were knowledgeable about the practices of the institution and the expectations placed on students. Student affairs personnel were better able to work with individual students regarding their retention, and the institution benefitted by efficiently providing a service to students that promotes success (Cook & Stearns, 1993).

### *Expansion of Orientation Programs in Higher Education*

Beyond an orientation program designed for all students, the practice of focusing orientation programs for certain groups of students who may benefit from additional interaction with the college environment has grown (Atkins, 1978; Beran, 1996; Cho, 2012; Condon et al., 2013; Fowler & Boylan, 2010; Labun, 2002; Turner, 2013).

Program specific orientations within the institution have generally been focused on the program itself by introducing students to program expectations, support services, and skills that may assist them in their successful progression through the program. No matter when or how many times students may go through an orientation program, the goal is to help them become part of a community-building experience designed to promote retention, performance, and satisfaction (Robinson et al., 1996).

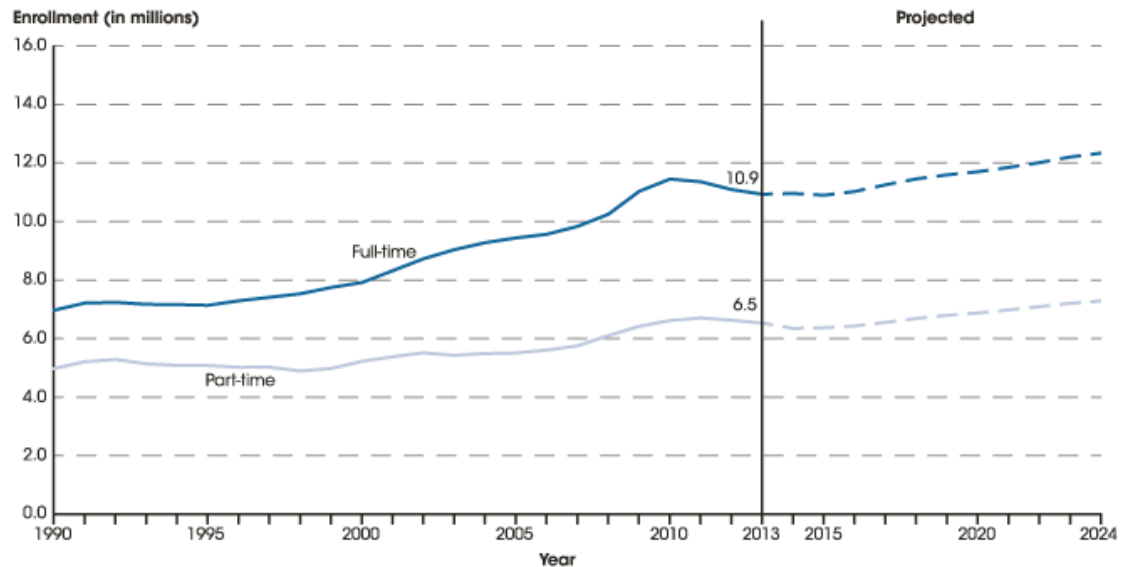
Institutions of higher education have utilized orientations as a way to disseminate information, prepare students for the expectations of college, and encourage them to be involved in the academic and social culture of college (Cuevas & Timmerman, 2010). The primary impetus for student orientation is to improve student performance (grade

point average [GPA]), increase retention rates, and improve graduation rates (Booker, 2006; Busby, Gammel, & Jeffcoat, 2002). Community colleges have taken advantage of the research findings of four-year institutions and adapted their orientation best practices to promote student success, academic performance, and graduation rates in their institutions (Center for Community College Student Engagement, 2013; Fowler & Boylan, 2010; Green & Miller, 1998; Zeidenberg, Jenkins, & Calcagno, 2007). The success of general orientation programs has given rise to program-specific orientation programs for undergraduate and graduate students (Golde, 2000; Courage & Godbey, 1992; Washburn, 2002).

Nurse educators have also contributed to the literature on the use of orientation programs as a method to promote retention of the students whom they serve. Orientation programs for baccalaureate-level nursing programs have been successful in improving retention, graduation rates, and licensing examination pass rates (Condon et al., 2013; Courage & Godbey, 1992; Gilmore & Lyons, 2012; Hansen et al., 2009; Igbo et al., 2011; Melillo et al., 2013; Sutherland et al., 2007). There has, however, been limited literature about the use of orientation programs to improve retention rates for associate degree nursing students (Fontaine, 2014; Rateau, 2001). This dissertation research was conducted to examine the difference, if any, in the first year retention rates of newly admitted associate degree nursing students who participate in a program-specific orientation program and those who do not participate in such a program.

### Student Demographics

Higher education student enrollment in the United States increased 37% between 2000 and 2010. As shown in Figure 1, this included increases in both full-time and part-time enrollment (NCES, 2015). Unfortunately, the increase in enrollment did not convert to an increase in graduation rates for two-year institutions and only a minimal increase (less than 5%) for four-year institutions (NCES, 2014c). The lack of congruence between enrollment and graduation indicates that though more students have been enrolling in postsecondary education, they have not been reaping the reward of completing a college degree.



NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2013. Some data have been revised from previously published figures.

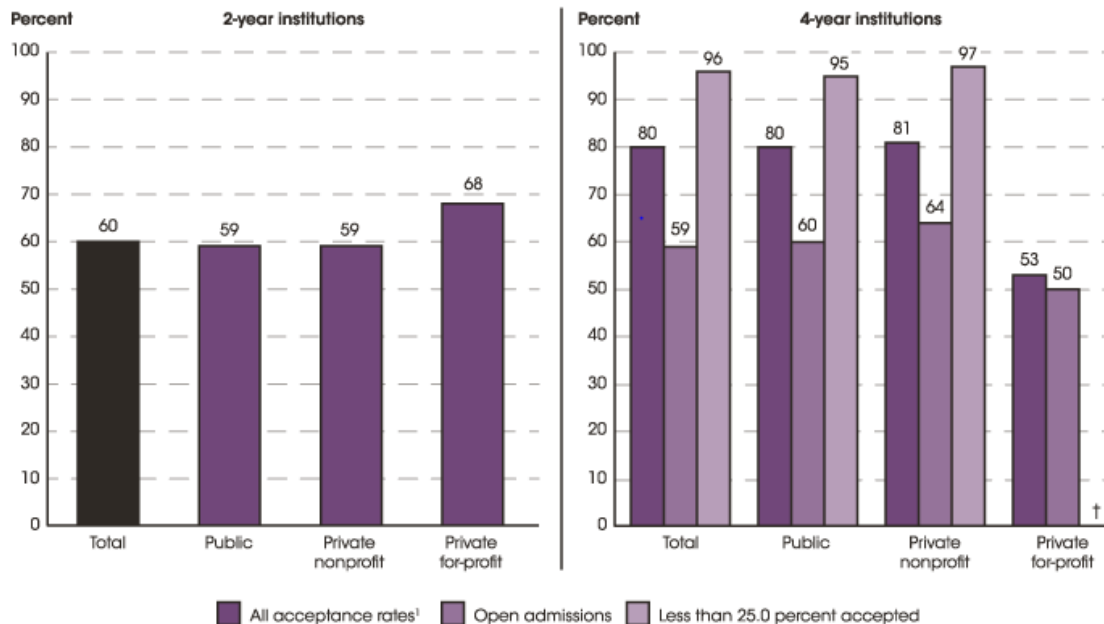
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, [table 303.70](#).

*Note.* Adapted from National Center for Educational Statistics (NCES). (2014d). *Digest of Education Statistics 2014*.

*Figure 1.* Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by attendance status: Fall 1990-2024.

As shown in Figure 2, one-year retention rates varied by 47% at four-year institutions depending on the selectivity of the institution. One-year retention rates at two-year institutions were more congruent between institution types (NCES, 2015).





† Not applicable.

<sup>1</sup> Includes open admissions, all percentages of applicants accepted, and information not available.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Retained first-time undergraduates are those who returned to the institutions to continue their studies the following fall.

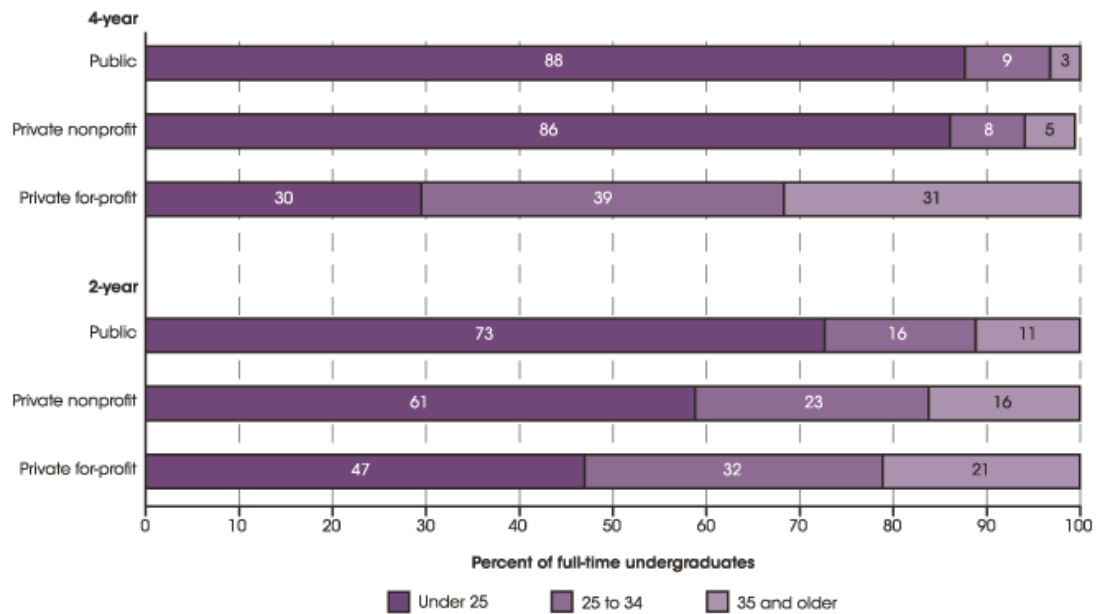
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component; and Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2014*, [table 326.30](#).

Note. Adapted from National Center for Educational Statistics (NCES). (2014e). *Digest of Education Statistics 2014*.

Figure 2. Percentage of first-time, full-time undergraduates retained at 2- and 4-year degree granting institutions, by institution level, control of institution, and acceptance rate: 2012 to 2013.

The distribution of students by age has not changed in recent years (NCES, 2015).

Students over the age of 25 years represented up to 70% of full-time enrollments at four-year institutions and up to 53% of full-time two-year institution enrollments (Figure 3).

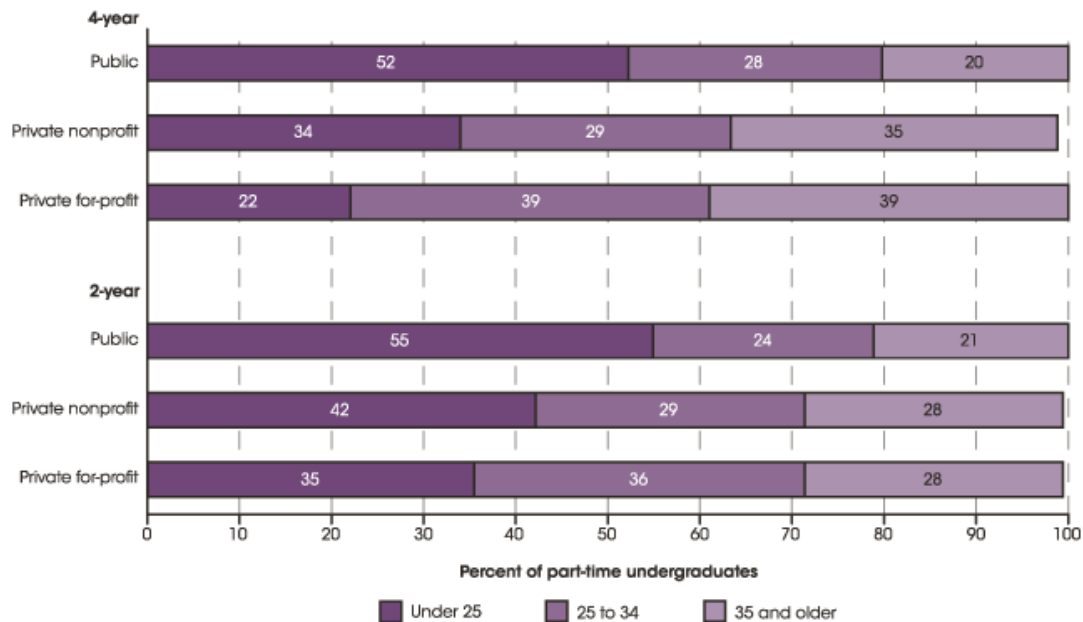


NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, [table 303.50](#).

Note. Adapted from National Center for Educational Statistics (NCES). (2014f). *Digest of Education Statistics 2014*.

Figure 3. Percentage distribution of full-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2013.

Part-time enrollment statistics (Figure 4) indicated an even higher percentage of 25-year-olds and over enrollments (NCES, 2015). Although the difference was expected to narrow over the next 10 years, it provides insight into the changes in student demographics. Based on the changing student demographics, the needs of these adult students have forced higher education to evaluate the content of their orientation programs to confirm they are meeting the needs of current student populations.



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2014, Enrollment component. See *Digest of Education Statistics 2014*, [table 303.50](#).

Note. Adapted from National Center for Educational Statistics (NCES). (2014f). *Digest of Education Statistics 2014*.

*Figure 4.* Percentage distribution of part-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2013.

The changing demographics of the student body have been the source of some of the changes to orientation programs. Since the 1960s, one of the most important changes to the student body has been the inclusion of racial and ethnic groups who had previously been denied access to higher education (Upcraft, 1993). The racial and ethnic make-up of each institution is different, and this provides a rationale for the unique programming implemented on different college campuses around the country. The gender composition of the student body has also changed, with women outnumbering men since the 1980s.

There has been a trend towards students' carrying part-time course loads instead of enrolling full-time (Upcraft, 1993). More recently, between 2002 and 2012, part-time enrollment rose nationally by 19% (NCES, 2015b). This change in enrollment patterns has affected the time to graduation as evidenced in many state, national, and accreditation reports requiring documentation of on-time and 150% graduation rates from programs and institutions. Accompanying the increase in the age of students attending college has been an increase in the number of students who live off campus and commute. With the passing of Section 504 of the Americans with Disabilities Act in the 1970s, college campuses have seen an increase in students with disabilities. Colleges and universities have also been actively recruiting international students to their campuses (Upcraft, 1993). All of these changes have led to institutions needing to identify and implement programs that support the needs of the diverse student population in order to promote student success.

Nursing education programs have not been able to increase enrollments on the same scale as the general college population due to limitations such as a lack of qualified faculty, lack of clinical placements, and a lack of classroom space (National League for Nursing [NLN], 2013a). The lack of an increase in nursing enrollments has come at a time when graduation rates have remained relatively unchanged for the last five years (Table 3). The inability to increase nursing enrollments makes retention efforts even more important for this group of students.

Table 3

*Five-year Graduation Rates of Students in Four-year and Two-year Nursing Programs*

Degree	2008-09	2009-10	2010-11	2011-12	2012-13
Bachelor	78.9%	79.5%	78.3%	78.3%	79.2%
Associate	73.7%	73.6%	73.4%	74.6%	74.5%

*Note.* Adapted from “2013 Annual Report to Constituents”, by the Accreditation Commission for Education in Nursing, 2013.

In an effort to acclimate and assimilate students in the most positive manner that produces positive student achievement, orientation to the specific program of study must be a responsive effort to meet student needs (Mack, 2010). Adjustments in presentation format, modality, timing, and information provided should be refined to accommodate these dynamic changes. In nursing education, 16% of the students enrolled in baccalaureate-level and 50% of the students enrolled in associate degree programs were over the age of 30 (NLN, 2013a). With such a large number of adult students entering nursing education programs, educators must be sure their retention programs support the needs of the broad range of students entering the programs (Jeffreys, 2015).

Adult Learners

Adult learners attend college for various reasons (Greenfeig & Goldberg, 1984). Job loss, the need for financial independence, and career changes are common reasons why adult learners return to or attend college for the first time. Though many adult learners have experienced transitions in their lives, many of them have low self-esteem or lack confidence in their ability to be successful in their higher education endeavors.

Orientation programs can serve as a way to initiate these individuals into the student role. The programming should take into account the various backgrounds these students come from and adapt to their needs (Greenfeig & Goldberg, 1984).

Many adult learners must coordinate school, family, work, and other commitments. They may also have different educational goals from traditional students, and these goals may change as students' progress through their educational experiences (Wonacott, 2001). Adult students are typically affected by three types of factors: situational, dispositional, and institutional. Situational factors can be outside of students' control (e.g., family, legal, health, or financial issues). Dispositional issues vary due to students' prior experiences, their self-esteem, and their expectations of the educational process. The final factor, institutional, can become a hindrance if students do not have the ability to overcome barriers to enrollment such as the cost of college or navigating the procedures to enroll. "Orienting adult students to educational programs is viewed by many as the first step towards retention" (Wonacott, 2001, p. 3). Orientation is a way to inform adult students about the specifics of educational programs that can help them develop realistic goals and to assess their capacity to be successful. Snider (1999) indicated that even if adult students have a set educational goal, they can gain confidence by participating in goal-setting orientation activities.

There have been conflicting results in the evaluation of student age and student success. Owen (2003) reported a positive relationship between student age and GPA, and Kasworm and Pike (1994) found that adult students exceeded traditional-aged students in cumulative average GPA. However, Glass and Garrett (1995) found no significant

relationship between age and GPA. Murtaugh, Burns, and Schuster (1999) found that attrition increased with student age. They attributed this result to the idea that age, along with geographic origin, may “influence a student’s quality of life at the university” (p. 357). For this reason, it is important to be aware of the needs of adult students that may be different than other segments of the student population.

Giancola, Munz, and Trares (2008) highlighted the idea that adult learners bring with them personal, work, and life experiences that identify them as diverse individuals with their own group. This idea adds support to the use of a different model to explain academic performance for adult students (Kasworm & Pike, 1994). Donald’s Model of College Outcomes for Adults (1999) considers six factors that influence an adult learner’s college experience: (a) prior experiences, (b) motivation, self-confidence, and values, (c) cognition, (d) “connecting classroom” to facilitate social engagement, (e) life-world environment, and (f) the types and learning outcomes desired by adult learners. Because adult learners attend college for a variety of reasons, their motivations, goals, and engagement level can be different from traditional students.

The 21st century nursing student represents more diversity than ever before, and this diverse composition is better equipped to meet the needs of today’s healthcare consumer (Jeffreys, 2007). Table 4 displays how nursing programs compare to the general U.S. undergraduate population in male, minority, and adult learners.

Table 4

*Nursing Student and General U.S. Undergraduate Enrollment by Gender, Race, and Age*

Enrollments	2010		2011		2012	
	Nursing	Undergraduate	Nursing	Undergraduate	Nursing	Undergraduate
Male	13%	43%	15%	43%	15%	43%
Minority	27%	38%	24%	40%	26%	41%
Adult students (30+)*	59%	24%	58%	21%	66%	31%

Source: NCES. (2014g). Total fall enrollment in degree-granting postsecondary institutions, by attendance status, sex of student, and control of institution: Selected years, 1947 through 2023. NCES. (2013). Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, sex, attendance status, and race/ethnicity of student: Selected years, 1976 through 2012. NCES. (2014h). Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, control and level of institution, attendance status, and age of student: 2013. National League for Nursing. 2013. Annual Survey of Schools of Nursing, Fall 2012.

\*Nursing enrollment values were only available for students 30 years old or older. This table also displays U.S. undergraduates 30 years old or older. NCES defines an adult student as 25 years old or older.

The recruitment and enrollment of non-traditional students does not ensure program completion. Jeffreys (2007) defined a non-traditional student as “meeting one or more of the following criteria: (a) 25 years old or older, (b) commuter, (c) enrolled part-time, (d) male, (e) member of an ethnic and/or racial minority group, (f) speaks English as a second (other) language, (g) had dependent children, (h) has a general equivalency diploma (GED), and (i) required remedial classes” (p. 161). With such a large percentage of adult learners in nursing programs, retention efforts must meet the needs of these students. Educators must identify and assess the strengths, weaknesses, and barriers for these students before interventions can be implemented. Jeffreys (2007) used the Nursing Undergraduate Retention and Success model (NURS) to study associate and baccalaureate level nursing students to determine student perceptions of factors that hindered or supported retention. The NURS model includes outside factors,



environmental factors, academic factors, student characteristics, institutional integration factors, and student affective factors (Jeffreys, 2015). Operationally, outside factors are local, state, national, or global events that affect the politics, economics, systems, and employment in the healthcare field. Environmental factors include the student's financial and emotional support structure, their employment status, and their living and transportation arrangements. Student characteristics encompass age, race, ethnicity, language, gender, prior education, family education, prior work experience, and their enrollment status. Academic factors include the student's routine habits such as study skills, time management, school attendance patterns, and class schedule. Institutional integration factors include faculty advising, professional engagement, and peer mentoring or tutoring. The final factor group, student affective factors, includes motivation, self-efficacy, and personal beliefs and values (Jeffreys, 2015).

Jeffreys (2015) cited the most supportive factors for retention as the emotional support of friends, both inside and outside the program, and family members. Institutional factors, such as faculty advising, skills laboratory, library, and computer labs, were considered moderately supportive. Restrictive or hindering factors to retention were related to family obligations and financial issues. Jeffreys (2015) observed that there was little difference between demographic variables and student perceptions. Nursing programs may not be able to change the emotional support the student receives outside of the program, but the faculty can create an atmosphere that fosters students' abilities to compensate for this shortcoming by providing opportunities for the student to develop positive, supportive relationships within the program with their peers and the

faculty. In order for students to successfully live the experiences of nursing students, they must be provided the opportunities to learn, understand, and model the expectations, skills, values, behaviors, and attitudes expected of the role.

### Theoretical Framework

Orientation programs have continued to be implemented as part of the retention efforts at many institutions of higher education (Mack, 2010). They have been designed to help students successfully transition to the college environment by setting academic expectations, integrating students into the college culture, and promoting confidence in students so that they can meet their academic goals (Robinson et al., 1996). Work role transition theory also attempts to link the organizational outcomes with the needs of the individual to meet those outcomes.

Nicholson (1984) based his theory of work role transition on Glaser and Strauss's (1971) definition of status passages as any changes in employment status or content. The idea of work role transition has been used to describe the transition from college student to a professional nurse (Doody et al., 2012; Phillips, Esterman, & Kenny, 2015; Tastan, Unver, & Hatipoglu, 2013), professionals transitioning to the educator role (Schoening, 2013), when professionals move to a new project (Dubé, 2014), and school principals experiencing restructuring (Bredeson, 1993). Nicholson (1984) indicated that although the theory was developed for work and career position passages, the theory could be applied to other areas of transition.

The National League for Nursing (NLN) developed outcomes and competencies for nursing programs that would “prepare individuals grounded in values and ethics, with an understanding that knowledge is continually evolving, and with the skill to evaluate that knowledge and apply it in situations where nurses touch the lives of others” (NLN, 2010, p. 7). The goal was to develop competencies that would “build in depth and scope, so as to promote educational progression and enhance the ongoing development of the nursing workforce” (NLN, 2010, p. 7). Associate-degree nursing curriculum developed using the NLN Outcomes and Competencies includes a professional identity competency that aligns with the work role idea discussed in Nicholson’s (1984) work.

Implement one’s role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context (NLN, 2010, p. 35).

According to Nicholson (1984), work role transition requires role development and personal development. Becoming a student nurse focuses more on personal development as the role of the student nurse is clearly defined, and success is achieved when students are able to adjust their identity-related attributes to meet the role. Role development is more prevalent when the individual can “change [the] role requirement so that they better match his or her needs, abilities and identity” (Nicholson, 1984, p. 175). Because role development is outside the scope of the student nurse, this research was focused on the factors of personal development in the role transition process.

Personal development is influenced by an individual's ability to internalize the skills, attitude, values, and behaviors of the new role. The personal development process utilizes four variables that influence the success or failure of the work role transition: role requirement, prior occupational socialization, organizational socialization process, and motivational orientation (Nicholson, 1984). Within each of these variables, individuals utilize different modes of adjustment to navigate needed changes depending on their previous work or academic history and their personal traits.

Role requirement includes two features: the discretion and the novelty of the role (Nicholson, 1984). "Typical dimensions of discretion are the capacity to choose goals, the means for achieving these, the timing of means-ends relationships, and the pattern of inter-personal communication, influence and evaluation surrounding them" (Nicholson, 1984, p. 178). Low-discretion roles do not allow the person assuming the role to make changes to the work required for the role. The role of the student nurse is considered a low-discretion role. Low-discretion roles require the individual to meet the requirements of the role without attempting to make changes to the role (Nicholson, 1984). The student nurse must be willing to conform to the responsibilities, behaviors, values, and learn the skills associated with the nursing profession (West & Rushton, 1989). Failure to adapt to the new role, either through inadequate academic or non-academic performance, can result in attrition (Jeffreys, 2004). High-discretion roles, such as management positions, allow the individual to develop the role depending on their knowledge of the role requirements and their understanding of the supporting data for the goal of the role. High-discretion roles typically do not have peers within the company

with identical positions which allows for more role development opportunities as the individual moves through the transition process.

The novelty of the role is defined as “the degree to which the role permits the exercise of prior knowledge, practiced skills, and established habits” (Nicholson 1984, p. 178). With the large number of adult learners in nursing programs (NLN, 2013), these students may have prior experiences that can be useful as they make the transition into nursing school. Students with prior healthcare experience can find success and challenges in the role transition process. The student nurse role allows for flexibility of novelty (low or high), but there is a challenge for educators to balance resources that will assist students who have little to no experience with those students who may be able to replicate experiences from their prior roles (Nicholson, 1984). These resources can come in the form of orientation programs, mentoring, and socialization opportunities that focus on the strengths of both groups of students (Jeffreys, 2014).

The idea of work role transition can be used to describe a student’s transition into the role of the student nurse. Nicholson (1984) identified four modes, or ways, individuals adjust to their new roles: replication, absorption, determination, and exploration (Figure 5).

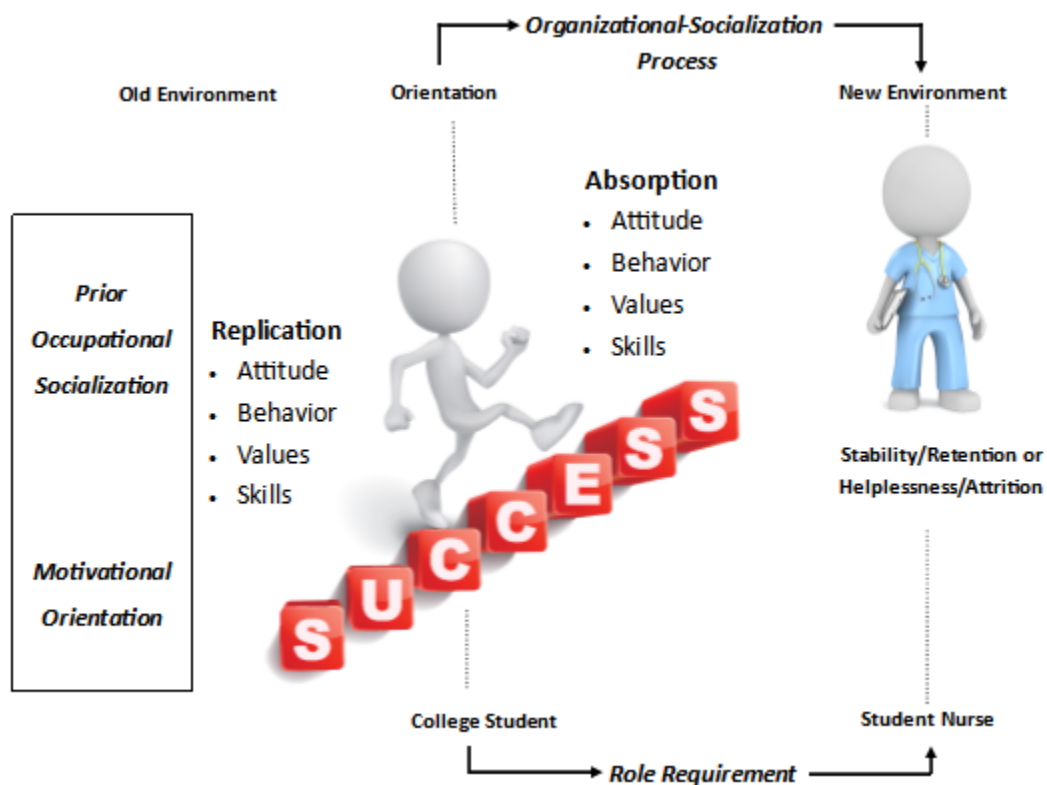


*Note.* See Appendix A for figure development information.

*Figure 5.* Model for the Work Role Transition Theory: Variables that influence the process and the four modes of adjustment into the new role.

The first two of these modes of adjustment, replication and absorption, are the focus of this research, as they are the modes used in the early stages of transition. New student nurses must undergo personal development in which they change their behaviors, attitudes, and values (Nicholson, 1984). Students making the transition will use their prior occupational socialization experience to successfully make the transition to student nurse. The way in which individuals have handled previous role transitions, or prior occupational socialization, can provide a foundation of how easily they will successfully socialize into their new roles (Nicholson, 1984). Students who already have the attitudes, behaviors, and values needed to fit into their new roles as student nurses will use replication to apply their attributes to their new environment. Students who embrace

replication practices will gain a sense of stability in their new role. Students who do not successfully replicate their current attributes may experience a sense of helplessness in their new role (Nicholson, 1984). For the purposes of the current study, Figure 5 has been modified by the dissertation author to display the journey new students take as they begin their path to becoming student nurses (Figure 6).



*Note.* See Appendix A for figure development information.

*Figure 6.* Early stages of transition grounded in present research.

The variable of organizational socialization processes is two-fold in that the employer must provide opportunities for employees to participate and the employee must

find value in the organizational socialization processes (Nicholson, 1984). Nicholson (1984) observed that personal development occurs “when induction processes and socialization mechanisms are (1) sequential (involve cumulative learning); (2) are serial (there are role models); and (3) involve divestiture (the abandonment or redefinition of status or attributes)” (p. 180). This aligns closely with the idea of using orientation programs to promote nursing student retention. Jacobs (2010) indicated the purposes of orientation programs were to: “disseminate information. . . [and] build a framework for academic success, build community, and define the campus culture” (p. 30). Orientation programs can also provide opportunities for new students to interact with their peers and faculty, thereby allowing the new students an opportunity to interact with role models. Long-term orientation programs, such as a student success course or a first-year experience model, provide students with opportunities to learn segments of their new role over a longer period of time.

Motivational orientation is the fourth variable that influences an individual’s ability to successfully transition into a new role (Nicholson, 1984). Individuals’ motivational orientation is dependent on their reasons for wanting to change roles and their psychological disposition towards this change. Nicholson (1984) identified two constructs that impact the transition process: desire for control and desire for feedback. Desire for control is strongest when individuals want to develop roles to suit their needs and want discretion over how they develop their roles. Desire for feedback is more evident in situations of personal development and novelty when there is a willingness to apply or learn the attributes of the role. An individual’s propensity for varying levels of



control and feedback will determine the modes of adjustment used by the individual (Nicholson, 1984). New nursing students must have a low desire for control. This will allow them to more easily utilize replication and absorption as they move into their new role. When there is incongruity between the desire for control and the individual's motivational orientation, the individual may become anxious and frustrated (Nicholson, 1984).

Anxiety is most often expressed by individuals experiencing an increase in the level of role discretion. Individuals who lack experiences to replicate or the skills needed to absorb the attributes of their new role as student nurses may be anxious about meeting the requirements of the program. One might expect these students may also experience a decline in their level of self-efficacy which can lead to unsatisfactory performance that can end in attrition.

Frustration is defined as "the feeling of not having adequate opportunities to utilize one's response repertoire" (Nicholson, 1984, p. 183). This behavior might be expressed by students who were previously in a highly discretionary role and are returning to school to change careers. Frustration might also be displayed by students who are currently working in the healthcare field and return to school to advance their careers (Jeffreys, 2004). Their desire for control may overshadow their ability to replicate and absorb the new attitudes, behaviors, values, and skills needed to meet the requirements of their new role (Nicholson, 1984).

West and Rushton (1989) surveyed nursing students at different stages of their training to gain retrospective reactions to "training, self-concepts, perceptions of work

environment/work characteristics, experiences of entering training, and work attitudes” (p. 275). Following Nicholson’s (1984) theory, students indicated high levels of personal change and low levels of role innovation during their low discretion nursing education experiences. In contrast to Nicholson’s (1984) theory, West and Rushton (1989) found students with a high desire of control also indicated high level of personal change. The researchers indicated that students were more likely to make changes to their reactions to the work-role transition mismatch instead of displaying frustration and indicating dissatisfaction. Students with a higher desire for control also felt more comfortable with additional responsibilities and problem resolution than students who had a lower desire for control. While this study was limited by convenience sampling and retrospective reporting, it does provide insight to the transition process of student nurses as they progress through their training program (West & Rushton, 1989).

The process of transitioning to a new role is dynamic and affects individuals in different ways. Individuals bring different experiences, motivations, expectations, and feelings with them, and this variation can influence an individual’s ability to adjust to a new role (Nicholson, 1984). Some students may move quickly through the replication and absorption modes of adjustment because of their prior occupational socialization experiences. Other students may move more slowly through the early modes of adjustment. The diversity of the student population in 21st century nursing programs would indicate that educators are having to balance the needs of both types of students. This can present challenges in identifying and implementing retention interventions that support the success of all of the students admitted to the nursing program.

### Work Role Transition Theory and Other Theoretical Concepts and Models

Work role transition theory draws from theories in life-span development, organizational change, and occupational socialization (Nicholson, 1984). Each of these groups of theories has a foundation in role theory and how role transition affects individuals and organizations. Role theory assumes that expectations are the basis for roles and that these expectations are learned through experience (Biddle, 1979, 1986). Expectations are set when various persons in a social system reach a consensus on the norms of the role. These social norms become the expectation shared by the social group. When the group, or an individual in the group, verbalizes or pressures another to meet these expectations or norms, the receiving individual can internalize, or conform to, the expectations in order to meet the norms of the role or they can resist and risk sanctions by the social group. The sanctions of the group vary depending on the role and the severity of the non-conforming behavior (Biddle, 1986).

Bronfenbrenner (1979) defined role as “a set of activities and relations expected of a person occupying a particular position in society, and of others in relation to that person” (p. 85). In Rahim (2011), role was commonly defined as “the view that an individual behaves with reference to the expectations that others have about the way he or she should behave” (p. 69). The concept of role includes the expectations, behaviors, skills, attitudes, and values recognized by society that should be demonstrated by a person occupying the role or position (Biddle, 1986; Rahim, 2011). Transition is defined as “passages or movements from one state, condition, or place to another” (Duchscher,

2008). The combination of these terms describes students' journeys as they transition from college students to nursing students.

Students often assume several different roles that may conflict with their determination to be successful in their new role as a student nurse. Tinto (1975) described these other roles as family background, pre-college schooling, and individual attributes. Each of these characteristics influences an individual's goal commitment, or motivation, to integrate into a new environment. These characteristics can also aid or hinder how an individual approaches the role transition process. Karp and Bork (2014) used role theory to describe the process students undergo as they transition into community college. Researchers found that students were unprepared for the demands and expectations of them in their roles as community college students. Students need to learn three aspects of their new role: the technical demands or the skills to successfully meet the role requirements; the normative expectations or the values and behaviors of the role; and desirability, which motivates the student to internalize their new role. The misalignment between institutional expectations and student knowledge contributes to low success rates (Karp & Bork, 2014).

Robles (2002) interviewed community college students who attended an orientation program to learn what aspects of the orientation were most influential in their decision to continue. Students indicated that their interactions with a counselor, touring the campus, learning time management and public speaking skills, and learning about potential careers were the aspects of the course that influenced them to persist. This insight identifies how students want to experience meaningful interactions with those

who can support them (meeting with a counselor), feel comfortable in their environment (campus tour), and learn the skills needed to be a successful college student (time management, public speaking), and to see how their college experience would advance them on their path to their desired career. By identifying and implementing what is important to students, institutions can develop orientation programs that align content with the early modes of adjustment needed to successfully transition to their new roles.

Work role transition theory ties in closely with the basis of Tinto's (1975) theory of student departure. Tinto (1975) described college as a social system from which an individual could withdraw. Tinto's theory of student departure, which is the framework that has been used by many researchers studying orientation programs, provides support for the use of work role transition theory in the context of orienting students.

Tinto's theory (1975) also incorporates students' goal commitment and considers how it is influenced by their personal characteristics, family history, and academic experiences. The idea of goal commitment is similar to individuals' motivational orientation and its influence on the outcomes of their role transition. Finally, Tinto (1993) discussed ways an institution can influence student retention. One strategy was to provide feedback to students. Work role transition theory also identifies feedback as a way to assist individuals in their transition into their new roles. Students must be provided with feedback concerning their performance so that adjustments can be made in their behavior that will support successful retention (Tinto, 2012). The ability to adjust behavior places students in an active role of their learning process. To be most effective, assessment should be conducted on a regular basis, should occur early in the process, and

should be formative and summative in nature (Tinto, 2012). Formative assessment opportunities provide students with frequent feedback in a low-stakes setting so that they can make adjustments prior to summative assessment requirements of the course. Providing students with an environment to learn from their mistakes without severe consequences provides a conducive learning environment that encourages student success and retention.

With the strong links between Nicholson's work role transition theory (1984) and previously used frameworks, this theory will be used to evaluate the effectiveness of a new student orientation for associate degree nursing students. The link between nursing education and professional practice provides an even stronger link to using a work-related framework, as the educational program is designed to prepare individuals for the expectations, behaviors, skills, and values of the practitioner.

#### Goal of Orientation

Titley (1985) indicated that though orientations differ in their activities, the overall focus is to help students become more comfortable in their new environment. Orientation can accomplish this by "provid[ing] a balanced introduction to the constraints imposed by, and the opportunities available in, the collegiate environment as well as to enable students to more clearly define their educational purpose" (Dannells & Kuh, 1977, p. 103). Although orientation can clearly benefit the student, there are other groups that can also benefit from the process. Many institutions have implemented a parent orientation program to assist them in establishing their role in their student's success, the

expectations that will be placed on their child, and services that are available to the student. Faculty benefit by having students who have already been introduced to the academic expectations and co-curricular activities that can help students be successful as they begin their college education. Finally, the institution benefits by providing a timely and efficient way to provide important information to students (Titley, 1985).

Orientation programs for specific groups of students can include general information (e.g., advising, financial aid, tutoring, and support programs) that pertains to all students (Titley, 1985). Depending on the specialty group, institutions may be able to adjust their general orientation or they may find it beneficial to host specialized orientation programs for certain groups. Examples of specialty groups could be veterans, marginally qualified students, transfer, or international students (Titley, 1985). Each institution must evaluate its programming to determine if it meets the needs of the target population.

The purpose of most orientation programs has historically been to introduce students to the administrative procedures and conduct expected by the institution, to acquaint students with campus organizations and services, and to provide time to meet current students and faculty in a non-classroom setting (Pascarella et al., 1986). Most orientation programs are evaluated on the retention of the participants through a second semester, the first year, or even through graduation (Beran, 1996; Derby & Smith, 2004; Igbo et al., 2011; Turner, 2013). Other orientation programs may also include an evaluation of the performance of orientation participants and non-participants (Derby & Smith, 2004; Kimmel, 2000; Pascarella et al., 1986; Zeidenberg et al., 2007). Some

institutions implement an orientation as a stand-alone retention practice (Gilmore & Lyons, 2012; Robles, 2002) while other institutions use orientation as one piece of their retention efforts (Atkins, 1978; Condon et al., 2013; Fontaine, 2014; Hollins, 2009; Saltiel, 2011).

Orientation programs require resources to operate, and they must continue to be evaluated for their effectiveness in promoting student success. Changes in the student population provide institutions with an opportunity to be innovative in the modality, timing, and content of orientation programs in order to meet the needs of a diverse student body. These innovations must be evaluated and shared in order to advance this area of student development (Ward-Roof & Guthrie, 2010).

### Community College Orientation

In 2013, the Center for Community College Student Engagement (CCCSE) identified orientation as one of the high-impact practices that can be used in a remediation program to promote student persistence. Boylan and Saxon (2002) discussed how orientation programs help prepare community college students for the expectations that were placed on them as well as a way to transition into the college academic environment. CCCSE (2013) also found that students who participated in an orientation program indicated that they believed they were more engaged than students who did not participate in an orientation.

For many institutions, orientation programs are part of an overall retention effort. According to Derby and Smith (2004), an institution's reputation, rankings in college



guides, and funding can be influenced by the student retention rate. A higher retention rate is often equated to a higher quality of the education. One of the challenges with retention at community colleges is that students have a variety of goals that make retention efforts difficult to track at the community college level (Derby & Smith, 2004). It is important to clearly define successful retention efforts for community college students.

Two-year institutions serve a diverse student body whose needs differ from those of traditional students who attend four-year institutions (Cook & Stearns, 1993). Cook and Stearns described the diversity of characteristics of students who enroll in two-year institutions around the country as follows: “Physically challenged, people of color or from different cultures, students from a variety of socioeconomic backgrounds, under-prepared students, those fresh out of high school, part-time students, older returning adult students, and others” (p. 117). Some two-year institutions have been formally orienting their students for many years, but others may only recently have started the practice of orientation.

Two-year institutions have evolved from being vocationally focused to expanding to provide a place for students to start their higher/post-secondary education prior to attending a four-year institution (Cook & Stearns, 1993). The mission expansion has increased the student population at two-year institutions, requiring a more formal orientation program to help students transition from high school to college. Two-year institutions provide an open access, low cost, geographically convenient, and flexible enrollment option to higher education that is not readily available in many four-year

institutions. The flexible enrollment option requires that two-year institutions meet the needs of a more diverse student body which begins with an orientation to their new environment.

Orientation programs at two-year institutions are philosophically similar to those of their four-year counterparts, but they are typically different in the format used to present to students (Cook & Stearns, 1993). All orientation programs should have a mission and develop objectives for the program. These objectives may vary depending on the population the program is designed to reach. Cook and Stearns (1993) suggested that orientation organizers begin by developing a program for one population of students and then expand the program to include activities that may be tailored to particular populations. The flexibility of the orientation program promotes its ability to serve the needs of a diverse student population (Cook & Stearns, 1993). It is important to identify the needs of the prospective orientation audience and to create orientation programs that provide the resources required to assist in a successful transition into the college environment.

In 1998, Green and Miller evaluated a first-year orientation course at a public two-year college to determine its effects on student GPA and long-term retention rates. The course topics were designed to promote and develop personal, academic, and career goals (Green & Miller, 1998). First-year students voluntarily enrolled in the orientation course, and the control group was developed by matching students who did not take the orientation course but complemented the experimental group in demographics and academic characteristics (Green & Miller, 1998). Though the orientation (experimental)

group had higher GPAs, they were not significantly different from those of the control group (Green & Miller, 1998). The persistence rate was significantly different between the two groups, however, with the orientation (experimental) group persisting over an average of 6.23 quarters and the control group persisting for 4.71 quarters (Green & Miller, 1998). Because students voluntarily enrolled in the orientation course, it was possible that other factors contributed to student success that were not evaluated as part of the study.

Derby and Smith (2004) evaluated the use of an orientation course and its influence on student retention at a community college. The study separated student retention into four categories of students: (a) successful, (b) drop-outs, (c) stop-outs, and (d) persistent. Successful students completed their degree within two years. Drop-outs enrolled in less than three semesters of coursework within two years, averaged at least three courses each semester, and had less than a 2.0 GPA. Stop-outs completed at least three semesters with a three-course average course load, had higher than a 2.0 GPA, and limited their enrollment break to three semesters or less. Persistent students averaged at least three courses each semester in four semesters within two-years but failed to complete a transferrable degree (Derby & Smith, 2004). The orientation course was designed to integrate students into the college experience, identify support services and develop support systems to promote academic success, develop an academic plan and create awareness of the career development process, and encourage personal development (Derby & Smith, 2004).

The authors of the study separated their evaluation by regular, or non-transfer, and transfer students because it was thought that transfer students might be intrinsically more transient in their enrollment pattern (Derby & Smith, 2004). Non-transfer students were defined as having fewer than 16 credit hours of transfer course work, and reverse transfer students had 16 credits or more of transfer course work (Derby & Smith, 2004). Researchers found that non-transfer students (less than 16 credits of transfer course work) who took the orientation course were more likely to complete their degree on time and less likely to fit the drop-out, stop-out, and persistent categories (Derby & Smith, 2004). They also found that the orientation course was not as effective for reverse transfer students (students who transferred 16 or more credit hours from another institution) for the success, stop-out, and persistence categories of students. They found a significant difference in the drop-out status for students who took the orientation course when compared to reverse transfer students who did not take the course (Derby & Smith, 2004).

One of the study's limitations was that only students who enrolled in the daytime offering of the orientation course were evaluated (Derby & Smith, 2004). Students with certain characteristics, such as having a daytime job, therefore, were excluded from the study. There was also a question about the internal validity of the study because a random assignment of students into the orientation course was not possible in this setting (Derby & Smith, 2004).

In 2007, Zeidenberg et al. tracked Florida community college students over a 17-term period to determine if enrollment in a student success course improved the degree or

certificate completion or student transfer rates to a four-year institution. The researchers found students who enrolled in the student success course were more likely to earn a degree or credential. Students enrolled in the success course were also more likely to transfer to a four-year institution.

Hollins (2009) compared a new student orientation and the standard group advising session for first-year, first-time-in-college students at a community college to determine if the orientation program resulted in a difference in academic performance and retention rates. The orientation program included a general welcome from an executive level officer, an introduction to campus life, a campus tour, an overview of support services, an advising session, and registering for classes (Hollins, 2009). Students in both groups were also encouraged to take a one-credit orientation course their first semester (Hollins, 2009). The orientation program and the group advising did not show any statistically significant difference in GPA for students who participated or did not participate in either program (Hollins, 2009). Students who participated in the orientation and the one-credit orientation course had a higher GPA than those who did not participate in either. Also, there was a statistically significant difference in the mean GPA (2.270) of students who participated in both group advising and the one-credit course compared to the mean GPA (2.032) of students who did not participate in both activities (Hollins, 2009). Students who participated in both the orientation and group advising showed significant one-semester retention rates from fall to spring semester whether they participated in the one-credit course or not (Hollins, 2009). The results suggest that interactions with students over a longer period of time, as was exhibited in

the one-credit semester course, may be the best way to assist students in their transition into college (Hollins, 2009).

Fowler and Boylan (2010) studied a comprehensive development program for students at a two-year institution who had been placed in developmental reading, writing, and mathematics courses. The program included an orientation, a first-year experience transition course, advising, and tutoring (Fowler & Boylan, 2010). Students participating in the study were compared with a similar group of students who were placed into the same courses prior to the Pathways to Success (PWAY) program being implemented (Fowler & Boylan, 2010). The orientation program concentrated on expectations and student responsibilities while in the program, support services including advising and tutoring, and developing the student's class schedule (Fowler & Boylan, 2010). Advisors talked with students about how work, family, study time, and transportation costs could impact their success, and they adjusted schedules and identified resources to assist students as they started their academic careers (Fowler & Boylan, 2010). The results indicated that students in the PWAY program had significantly higher cumulative GPAs, better academic standing, more success in the developmental course work, and higher one-year retention rates than the students in the control group (Fowler & Boylan, 2010). One of the limitations of the study was that the researchers could not identify which parts of the program contributed to student success (Fowler & Boylan, 2010). The elements of the comprehensive development program implemented expectations and support conditions identified by Tinto (1993) as areas of need to support retention and persistence to graduation.

A state college that offered two-year degrees in Ohio implemented a mandatory new student orientation for 1,000 new students as part of their Foundation for Success program in order to promote relationships between students, staff, and faculty members (CCCSE, 2013). The institution saw a 10% increase in fall-to-fall retention rates in the first year of implementation (CCCSE, 2013). Findings indicated that by engaging students at an early point in their academic careers, institutions could harness students' desires to belong by involving them in activities that would promote their persistence and retention.

A state college in Florida evaluated their orientation program for associate degree students as part of a group of five retention initiatives to promote student retention and success. The college replaced its online orientation with face-to-face orientation for students who scored low on their placement tests (Law, 2014). The face-to-face orientation included an intensive advising session as well as assigned advisors who would make contact with students assigned to them during the first weeks of class (Law, 2014). After 18 months of implementation, 92% of the students who participated in the new orientation and advising program remained enrolled (Law, 2014). The retention rate closely matched the retention rate of students who were not required to attend the face-to-face orientation because they scored higher on the placement test, indicating they were better prepared for college (Law, 2014).

The orientation programs discussed in this section highlight the differences in implementation and how The Center for Community College Student Engagement (CCCSE, 2013) identified orientations as one of the high-impact practices that can be

used in a remediation program to promote student persistence. Boylan and Saxon (2002) discussed how orientation programs help prepare community college students for the expectations that are placed on them as well as a way to transition students into the college academic environment. CCCSE also found that students who participated in an orientation program believed they were more engaged than students who did not participate in an orientation. Institutions determined success by retention rates, GPA, and graduation rates. These measures of student success are the standard by which orientation program outcomes are determined for various groups of students.

#### Undergraduate/First-Time College Student Orientation

A first-time- in-college (FTIC) student is defined as “a student who has no prior postsecondary experience attending any institution for the first time at the undergraduate level” (NCES, n.d.). The definition includes students who “enter college with advance standing (college credits earned before graduation from high school)” (NCES, n.d.). The term undergraduate refers to “a student in a 4- or 5-year bachelor’s degree program, an associate’s degree program, or a vocational or technical program below the baccalaureate” (NCES, n.d.). Orientation programs were designed to introduce first-time, undergraduate students to their new environment, their role within the environment, and to help them understand how they fit into the fabric of the institution (Mack, 2010). In order to positively facilitate the transition, the orientation program was designed to “deliver information, content, and challenges. . . to serve as an introduction to the distinct community values and to set high expectations of students during their tenure at the



institution” (Mack, 2010, p. 4). Mack identified orientation programs as the foundation for student development as they advanced their academic careers.

Early research on orientation programs yielded conflicting results that either supported or refuted the use of an orientation program to improve retention and student performance (Chandler, 1972; Cole & Ivey, 1967; Jesseph, 1966). The need for more evaluative studies on orientation was expressed by many early researchers in order to explain the inconsistencies in research findings (Caple, 1964; Chandler, 1972; Pascarella et al., 1986). Even as late as the early 1990s, researchers were concluding that orientation may only have an indirect influence on student achievement because previous research did not control for the voluntary nature of early orientation programs. They also expressed the belief that student participation may have been influenced by personal motivation and a commitment to succeed (Fox, Zakely, Morris, & Jundt, 1993).

Chandler (1972) evaluated the effect of orientation attendance on first-year freshmen’s academic achievement, persistence, and personal-social adjustment. Orientation was offered as a campus or a two-day camp experience prior to the start of classes. Students self-selected into either format. In order to determine if there was a difference between the type of orientation selected, Chandler evaluated both groups for age, sex, high school GPA, SAT or ACT scores, first quarter credits taken, and living arrangements (campus, off campus, or home). A small sample of students (n=44) who did not know about the orientation and those who elected not to attend were also evaluated (Chandler, 1972). Reported findings indicated that students who attended orientation, in either format, earned better grades, were more likely to be retained, and

participated in more campus activities. Students indicated the ability to make new friends was the most valuable part of the orientation. Chandler reported that the reason students did not attend the orientation was due to work schedule. This student characteristic was not evaluated in the study and could be related to a student's motivation to attend college which could also contribute to differences between the students who attended and did not attend the orientation. Because of the conflicting results in earlier research, Chandler postulated that motivation may play a larger part in student success. He indicated that motivated students might be more likely to attend a voluntary orientation. He also suggested the inclusion of necessary activities, such as course registration, would encourage students of all motivation levels to attend the orientation. In later years, some institutions used this information to mandate their orientation program for students (Mack, 2010).

Pascarella et al. (1986) randomly sampled 1,900 students from the freshmen class of a residential university prior to, during, and directly after their first year of college. The orientation program was voluntary and the overall goal was to "facilitate the successful transition of new freshmen from secondary school to a new and quite different setting" (Pascarella et al., 1986, p. 159). The overall goal was to be met through three objectives: "development of academic awareness, awareness of institutional services and resources, and identification with the institution" (Pascarella et al., 1986, pp. 159-160). The study was designed to determine the effect of orientation on persistence versus voluntary withdrawal (Pascarella et al., 1986). Voluntary withdrawal was defined as "the student's withdrawing from an institution prior to the sophomore year without being

forced” (Pascarella et al., 1986, p. 158). The study was based on Tinto’s theoretical model of student background characteristics and initial commitment as measured by antecedent impacts and social and academic integration (Pascarella et al., 1986).

The voluntary nature of the orientation provided a small but statistically significant profile of the types of students who self-selected into the orientation (Pascarella et al., 1986). Students who attended the orientation tended to be non-minority, more socially integrated into their secondary school, come from a higher socioeconomic household, and have a higher level of initial commitment to the institution (Pascarella et al., 1986). Orientation provided the highest positive, indirect effect on freshman year persistence by providing a positive, direct effect on social integration and institutional commitment (Pascarella et al., 1986). When background characteristics and initial commitment were held constant, orientation had the third largest direct effect on persistence behind social integration and institutional commitment, both of which were strongly influenced by participation in the orientation itself (Pascarella et al., 1986). Orientation had the highest level of influence on students’ extracurricular participation and more informal contact with their faculty during the freshman year (Pascarella et al., 1986).

Pascarella et al. (1986) determined that orientation provided the students in the study with the ability to cope with the transition to a new environment and social challenges. A limitation of the study was that it was only conducted at one institution for one entering class. Pascarella et al. also believed that for orientation to have a more direct effect on student persistence, it would require an evaluation of length of the

orientation experience. There was also a concern about internal validity because the orientation program was a self-selecting program. These findings led to the need for more research in the use of orientation programs over a longer period of time, how they are mandated, and their implementation as part of a larger retention effort.

Institutions used research findings to advance the orientation program area of student development programming from an informal offering to an organized profession (Mack, 2010). In the 1980s, approximately 30% of institutions indicated they mandated orientation, but by the early 2000s, 60% of institutions mandated orientation. The change in mandating orientation was also reflected in the participation of transfer students in orientation programs. By the 2007-2008 academic year, institutions indicated that approximately 70% of their transfer students attended an orientation program (Mack, 2010).

As the student population at four-year institutions began to change, due to an increase in commuter students, the influence of orientation on student success needed to be applied to this growing sector of the student body. Orientation has been determined to be one way for institutions to encourage social and academic integration of new students. Pascarella, Duby, and Iverson (1983) assessed Tinto's model of student withdrawal in a commuter university setting using the American Council on Education (ACE) incoming student survey and a follow-up survey. The study population was representative of the institution's freshman class in gender, academic aptitude, and age but was not representative by race. An algorithm was used to adjust the weight of underrepresented group responses. The researchers evaluated five variables (background characteristics,

initial commitment, academic and social integration, subsequent goal and institutional commitment, and withdrawal decisions) based on Tinto's theory and one variable based on Bean's concept of intention to leave or stay (Pascarella et al., 1983). The results indicated that background characteristics were as important, if not more important, in students' decisions to withdrawal than their integration and commitment while in college. Academic integration had a strong positive effect on persistence, but social integration had a negative effect, this in conflict with Tinto's model. The disconnection between academic and social integration would indicate that a commuter student's institutional commitment was defined by the student's academic interactions rather than the social opportunities of the institution (Pascarella et al., 1983). Intention had the strongest direct effect on persistence and was most influenced by the student's institutional commitment at the end of the freshman year. Although some of the results aligned with Tinto's model based on residential institutions, some areas of the model were expressed differently between commuter and residential institutions (Pascarella et al., 1983). The results may have been due to the personalities of students who chose residential as opposed to non-residential institutions. Students who are used to an environment that provides a high level of social integration are more likely to thrive in residential institutions. The study was conducted at one institution over one academic year which could have presented weaknesses in external validity. Due to the variability in non-residential institutions and their ability to offer academic and social integration programs, the authors noted that more research was needed to clarify the patterns that influence student withdrawal (Pascarella et al., 1983).

Another way higher education has changed to meet a more diverse student body has been through online learning which has become an important modality for content delivery in higher education (Cho, 2012). Inherent in the electronic educational environment has been the lack of integration expressed by Tinto (1975). Online learners may feel socially isolated due to limited opportunities for interaction with their classmates and technical issues, and this isolation, according to Cho (2012), has led to a higher attrition rate than that of students who attend traditional classroom courses. Cho evaluated an online student orientation (OSO) program for students who were planning to take an online course or those students who were taking an online course and needed additional guidance. A convenience sample of 63 students completed the evaluation of the OSO program. Students were either enrolled in a general online learning course that encouraged interaction between students or a medical terminology course that relied on self-study methods with minimal interaction between students. These two courses were selected as a sample from the range of online course profiles at the university, and students were asked to evaluate six areas of the OSO program: navigation, content, accessibility, design and development, understanding, and satisfaction. Students were also invited to further explain their satisfaction level and suggestions through open ended questions. Overall, students were satisfied with the OSO program. Understanding and content contributed most to the prediction of satisfaction. Students who submitted additional information indicated content, ease of navigation, and helpfulness were the top reasons for their satisfaction. Suggestions for improvement focused around the design of the online platform and mandating the OSO program for first-time online students. The

suggestion inferred the importance of orientating students to online learning. One of the important insights provided by the author was the importance of conducting a needs analysis to identify students' needs and existing resources that could be utilized to develop an OSO program (Cho, 2012). The results were limited by the convenience sample. Subjects in the study included a combination of new online students and those who had taken multiple online courses. Because the two groups were not evaluated separately, there may have been some additional information that was not identified in the overall evaluation. In the second decade of the 21st century, 11% of undergraduate students were reportedly taking online courses exclusively, and another 14% were enrolled in at least one online class (NCES, 2014b). It is important for orientation professionals to understand the specific needs of online learners and to design orientation programs that provide a link between students and their institutions that encourages integration.

The success of general orientation programs has fostered innovations in the development of specialized orientation programs. Orientations for family members, international students, and program-specific orientations have been used to facilitate students' transitions into their new environment. These innovations can be especially important for at-risk students who cite family responsibilities and emotional support as strong attrition factors (ACT, 2010). By implementing parent/family orientations, institutions invite students' support systems to be part of their integration into their new roles as college students.

Beran (1996) evaluated grouping students by interest and major and compared them to students who participated in a general orientation program. Students enrolled in the interest/major orientation group had higher retention rates than the students who attended a general orientation course. Lipe and Waller (2013) evaluated student retention rate and attendance at a general-population orientation course or a program-specific orientation course at a for-profit institution. The overall retention rate for the group was 64.6% for students who participated in a program-specific orientation course. The group was found to be 5% more likely to be retained, and there was a statistically significant association between student persistence and the type of orientation (Lipe & Waller, 2013). Both studies were limited to one institution over a short period of time, and this limited their external validity. The results, however, indicated there was promise in program-specific orientation. These researchers concluded that organizing orientation programs around students' majors or interests supported higher retention rates. By assisting students in developing social and academic support systems early in their college careers, institutions can find a strong return on their investment in orientation programs.

Turner (2013) advanced the idea of orientation programs designed to target specific student populations in order to improve retention rates. The evaluation of several orientation courses was conducted to develop a best practices model for an orientation program that would improve at-risk student performance. Turner (2013) found that interactions with support service resources (classroom visits from respective departments) and regular individual interactions with faculty members were the most



effective ways to impact at-risk students. This links to the work role transition theory in that at-risk students may have had very little experience with the behaviors, skills, and values required to initiate assistance. By creating an environment that allows interaction between the student, available support services, and faculty members who facilitate interaction, students have the opportunity to experience and learn how to navigate their new environment. Though early orientation programs provide students with the tools they need to be successful as they learn to become college students, additional orientation experiences can benefit individuals who continue their education and transition into a new higher education environment.

#### Baccalaureate-level Nursing Orientation

Orientation programs for baccalaureate-level nursing programs have been successful in improving retention, graduation rates, licensing examination pass rates, and providing an environment designed to improve student self-efficacy (Condon et al., 2013; Courage & Godbey, 1992; Gilmore & Lyons, 2012; Hansen et al., 2009; Igbo et al., 2011; Melillo et al., 2013; Sutherland et al., 2007; Tower et al., 2015). Courage and Godbey evaluated an orientation program that was designed to improve the retention of baccalaureate nursing students. The program incorporated activities that aligned with Tinto's (1993) conditions of expectations, support, assessment and feedback, and involvement. The orientation program began just prior to the first day of classes with tours of health facilities and social events hosted by current nursing students that were designed to encourage students to acclimate to campus and student life (Courage &

Godbey, 1992). Once classes began, new students were placed in clinical groups of six to eight students. These groups afforded students an opportunity to get to know one another and their clinical instructor. Each group reviewed institutional and program expectations, and participated in a mentoring program with a senior student. Through the first semester of the program, students were provided access to peer tutoring, academic advising, and academic monitoring. The academic monitoring provided early and regular feedback to students who were struggling and connected them with support services to overcome their challenges. Academic awards were given to students who made the dean's or president's list, participated in the nursing honor program, and were invited to join the nursing honor society (Courage & Godbey, 1992). By celebrating the academic achievement of students early in the program, the faculty sought to build students' self-efficacy that would assist them as they progressed through the program.

Condon et al. (2013) studied the effects of a pre-entrance program combined with social and financial support on persistence to graduation for disadvantaged and ethnically diverse baccalaureate nursing students. Disadvantaged students were defined by poor educational backgrounds or opportunities, low GPAs or test scores, or low family income. Condon et al. classified ethnically underrepresented students as those groups that were underrepresented in nursing (Native American, African American, Hispanic, and Asians from developing countries). Students selected for the program had GPAs and test scores that fell just below the standard admission criteria. Students were selected for the program if they (a) met the definition for disadvantaged or ethnically underrepresented students, (b) exhibited a strong desire to be a nurse, and (c) were

willing to participate in the pre-entrance program (Condon et al., 2013). A total of 77 students were admitted to the program, and all of them successfully completed the pre-entrance program which granted them admission to the baccalaureate program. The pre-entrance program included workshops on study skills, self-confidence, critical thinking, math skills, medical terminology, reading, writing, and informatics. Approximately 91% of the participants graduated from the program with an associate or bachelor's degree in nursing, and 98.6% of them passed their national licensing examination (Condon et al., 2013). Sutherland et al. (2007) observed that providing additional support to underrepresented students improves their preparedness for the program, and their self-confidence can result in successful progression to graduation.

Gilmore and Lyons (2012) reported using an orientation program for new online RN-BSN students that included program expectations, support services, and how to socially interact in an online environment. The faculty led orientation program reduced student attrition from approximately 20% to less than 1% (Gilmore & Lyons, 2012). With more bachelor's degree level programs being delivered in an online environment (Allen & Seaman, 2014), it is important to identify the needs of the online learner that may be different from students in the traditional classroom environment.

Hansen et al. (2009) studied the conversion of a face-to-face orientation to an online format for RNs transitioning to Bachelor of Science in Nursing (BSN) students. The change was made based on student feedback that the half-day campus session was difficult to schedule and students believed the time was too compact for the information presented. The online orientation was developed based on the topics provided in the

campus orientation including introductions by faculty, advising and library resources, technology skills, and program expectations. Many of the modules included multiple formats for information dissemination for different learning styles. Student evaluations indicated that students appreciated the flexibility of the online format and indicated they had gained a connection to the faculty through introduction videos and interactions during the orientation course. Many students took advantage of their access to the orientation course by referring back to it while in the first semester of the BSN program (Hansen et al., 2009). Though educators may express concern about the potential loss of connection when moving content to an online format, Hansen et al. indicated that careful planning and execution of the conversion can produce a product that encourages the desired positive interaction between students, faculty, and support services. Though the orientation was developed in the framework of Chickering and Gamson's (1987) *Seven Principles for Good Practice in Undergraduate Education*, many of the activities also met the conditions of Tinto's student retention theory (1993), such as expectations, support, and assessment and feedback (Hansen et al., 2009). Hansen et al. also supported the development of student self-efficacy through positive interactions with faculty prior to the start of the program.

The Affirming At-Risk Minorities for Success (ARMS) program was designed to improve the persistence and graduation rates for baccalaureate nursing students. The program included faculty advising and mentoring, tutoring, success seminars, and a personal laptop with supportive software (Sutherland et al., 2007). The success seminars were comprised of topics on test anxiety, study skills, and memory enhancement skills.

Some of the goals of the program were to increase minority and educationally disadvantaged retention, increase graduation rates, and success on the national licensing board examination. The results indicated the program interventions positively affected graduation rates, significantly increased grade performance in the nursing capstone course, and eliminated the ethnicity effects of national board examination success rate (Sutherland et al., 2007). The researchers found that White/Anglo pass rates were lower than all other groups in the program, indicating that the ARMS program was more helpful to the other groups of students, indicated as Hispanic, Asian Pacific, and African American. Sutherland et al. stressed that the sample size was too small to determine if there was a statistically significant difference or if the finding was due to typical variability.

Other findings indicated that the ARMS program students were less likely to initiate an advising session and struggled with the purpose of these meetings. Faculty had to change from waiting on students' requests to actively inviting the students for advising sessions (Sutherland et al., 2007). It is important for nursing faculty and staff to realize that some students may not intuitively know about or why advising services are available to them. These students could benefit from ongoing interactions with faculty, staff, peers, and mentors that can steer them towards resources that would benefit them. Once students in the study were acclimated to the resources available to them, they were very appreciative of and receptive to the support services and were able to link their improved performance to these opportunities (Sutherland et al., 2007).

Texas nurse educators implemented a multidisciplinary team to support baccalaureate nursing students from disadvantaged backgrounds in their retention efforts (Igbo et al., 2011). The program included a one-month summer program for students admitted to the program as well as a one afternoon a week program for the first year of the program. Non-nursing study skills experts worked with students to change their study habits to meet the expectations of the nursing program. Students assessed what study techniques worked for them and indicated that the sessions prepared them for the requirements of the program. Faculty reported that program participants were more prepared than other students and were more interactive in class activities. The overall graduation rate for students participating in the program over the three years was 76.8% which exceeded the state average of 69% (Igbo et al., 2011). The researchers also incorporated activities that were intended to build the program participants' self-efficacy. The communication activity was used to develop effective communication techniques including correct pronunciations, how to express themselves verbally and nonverbally, and how to add clarity and variety to their conversations (Igbo et al., 2011). The goal of these exercises was to build student confidence in their future interactions with faculty, staff nurses, and physicians. The career coaching activity encouraged students to identify long-term career goals, preparing a portfolio, and working with a mentor. Each of these activities was designed to encourage students to visualize their future in the profession and identify the actions that would be required to get to those goals (Igbo et al., 2011).

Students were also socialized in the role of the student nurse through tours of clinical facilities and simulation activities (Igbo et al., 2011). While touring the clinical

facilities, students were able to interact with senior nursing students and discuss success strategies. The interaction continued throughout the year and promoted positive role models for new students (Igbo et al., 2011). These experiences directly align with Bandura's (1997) sources of enactive mastery and vicarious experiences that build self-efficacy.

Although the Gilman and Lyons (2012) study was limited to one program, the Igbo et al. (2011) study included three nursing schools over a three-year period. By identifying promising best practices and replicating them, nurse educators may be able to identify programs that work to improve student persistence to graduation. Melillo et al. (2013) used the Bring Diversity to Nursing program to further involve baccalaureate students through a cultural diversity day, an online networking program, and incorporating culturally appropriate case studies and simulation scenarios. Students were able to experience a connection based on their background, but they also had the opportunity to learn about other cultures in the program. The program was open to all students admitted to the bachelor degree nursing programs with priority given to racially underrepresented students and economically disadvantaged students. Other retention strategies included a technology loan program, scholarships, and small group tutoring. The results of the study indicated a 96% average first-year retention rate, a 93% graduation rate, and a 92% first-attempt pass rate on the licensure examination for program participants (Melillo et al., 2013).

Labun (2002) evaluated an access program that included social, academic, financial, and personal support services in order to improve the recruitment and retention

of Native Canadian, refugee, immigrant, and single parent students in a baccalaureate nursing program. In order to qualify for the program, the student must have an academic history that would not make them eligible for the regular nursing program and have social, financial, cultural, and/or personal issues that would create a barrier to their success in the program. Labun (2002) described success as “the ability to follow through on stated goals, sufficient support systems to allow success, ability to complete an academically demanding course even though earlier school transcripts showed failure, raising a family, or being able to hold a job” (p. 313). The access program required one additional year of coursework that included courses in professionalism, student roles and responsibilities, English language development, and standard nursing courses such as anatomy, psychology, and sociology. Students were assigned an advisor/counselor who met with the students on a regular basis to identify and work through issues that may obstruct the student’s success. Access program students had to be successful in the first year of coursework in order to be admitted to the nursing major. As students successfully progressed through the nursing program, their college preparation and professional development coursework decreased.

To begin with, all access program students were mandated to attend a 2-week orientation that included program expectations, policies and procedures, and personal financial management (Labun, 2002). The orientation was also designed to create opportunities for students to develop relationships with each other, with current nursing students, and with faculty and staff. The program director indicated that students who



fail to create these relationships early in the nursing program are more likely to leave the program prior to graduation (Labun, 2002).

Approximately 60% of students who started the access program graduated and passed their licensing examination (Labun, 2002). Some students stopped-out of the program for a period of time. The program director and advisor/counselor met with the students prior to leaving to discuss their options for returning to the program. Labun indicated that students were successful because of the combination of services that were provided as part of the access program. The nursing access program began in 1981 and continued through the transition from a diploma to a baccalaureate program. The program has been instrumental in contributing to the increased number of Native Canadian and other underrepresented groups who are successfully completing the nursing program to meet the needs of a culturally and ethnically diverse population (Labun, 2002).

Altman et al. (2010) identified the importance of the collaboration between student services staff and faculty to develop and implement a freshman orientation course for nursing students. The objectives of the course were to “foster friendships among the students, introduce key faculty members, strengthen connections between students and advisors, provide an overview of the program, and present nursing career options” (Altman et al., 2010, p. 6). The orientation course consisted of four one-hour sessions with the first session focused on welcoming the new students by faculty and student services staff and provide the faculty an opportunity to discuss their path into nursing. The second and third sessions covered program expectations, discussions with

upperclassmen about the program, engagement opportunities, academic success skills, and a presentation from current nurses about their career in nursing. The last session included academic advising and registration as well as a discussion about advanced degree opportunities in the nursing profession. The results of the orientation course indicated that students appreciated the time taken by the faculty, staff, students, and presenters to welcome and encourage them as they enter the program and the profession as well as an opportunity to develop relationship with classmates and faculty (Altman et al., 2010).

Dela Cruz, Farr, Klakovich, and Esslinger (2013) used a two-day orientation program to set expectations, understand obstacles, and to discuss emotional challenges for second-career students entering a baccalaureate nursing program. The Second Careers and Nursing (SCAN) program was designed on Schlossberg's transition theory of moving in, moving through, and moving out by socializing students "into the nursing profession's knowledge, skills, and behaviors while they internalize nursing's values and goals" (p. 12). Participants were ethnically diverse and ranged from 21 to 53 years old. Participants in SCAN had an 88% retention rate, 94% licensure pass rate, and a 92% employment rate as RNs. Many graduates (88%) indicated they were enrolled in the SCAN graduate program (Dela Cruz et al., 2013).

The largest non-traditional variable among nursing students has been shown to be the adult learner. NCES (2013) indicated that 66% of nursing students were over 30 years of age in 2012 data. Fleming and McKee (2005) evaluated the needs of adult learners as part of the development of their orientation program. Though adult and

traditional students were interested in topics related to university life and study skills, adult learners indicated a need for workshops on informational technology, opportunities to meet other adult learners and program faculty, and a desire for more insight to program expectations and support services. The researchers specifically evaluated the needs of adult learners within nursing education. With such a high percentage of adult learners in nursing programs, more research is needed on what retention efforts are most valuable to this population of students.

#### Associate-level Nursing Programs

Associate degree nursing programs were developed in response to a nursing shortage after World War II (Orsolini-Hain & Waters, 2009). This response coincided with a recommendation to move nursing education out of the hospital setting and instead to educate nurses in colleges and universities. Hospital setting diploma programs were based on an apprentice model. Baccalaureate nursing programs supplied about 15% of the nursing graduates at the time, and these programs could not absorb the additional number of students needed to alleviate the nursing shortage. Changes in expectations of students desiring a college education, the support of national nursing leadership organizations, and the expansion of community colleges due to the Truman Commission on Higher Education all led to the idea of offering a two-year degree in nursing at community colleges (Orsolini-Hain & Waters, 2009).

The new programs attracted nursing students who were at the time considered nontraditional and typically ineligible for admission to hospital

programs. They were older and ethnically diverse and included men, single mothers, and married women who could not live at the hospital, which was a requirement of diploma programs at that time (Orsolini-Hain & Waters, 2009, p. 267).

Community college nursing programs attracted students from the local community who remained in the area after graduation to practice. Community colleges required little to no tuition, provided an increase in access to education, were geographically convenient to more communities, and outnumbered universities (Orsolini-Hain & Waters, 2009). In 1980, 20% of new graduate nurses came from associate degree programs. By 2013, over 50% of new graduate nurses came from associate degree programs (ACEN, 2013; Orsolini-Hain & Waters, 2009).

Admission to associate degree nursing programs has varied from open to limited access depending on the program and the respective student population (Beeson & Kissling, 2001). Selection processes used in limited access programs have been designed to predict student performance in the nursing program based on prior academic performance (Yates & Sandiford, 2013). Previous research has shown that GPA is a predictor of success in nursing programs and licensing examinations. Selecting candidates who are more likely to be successful has been based on a desire to produce more nursing graduates to meet the workforce needs as well as to meet nursing program accrediting agency benchmarks that indicate a successful program (Yates & Sandiford, 2013). Beeson and Kissling stressed that it is the responsibility of each nursing program

to develop admission guidelines that meet the needs of its student population and the community it serves.

### Associate-Level Nursing Orientation

Research on orientation programs for associate degree nursing programs is very limited. Rateau's 2001 study, conducted to evaluate how the implementation of an orientation program affected first semester retention for community college nursing students, was one of only two studies identified that pertained to this particular population. The orientation goals of this program were to encourage a positive relationship between students and faculty, to facilitate peer interactions, and to successfully transition students into the nursing program. The activities included test taking and critical thinking skills small group activities, small group forums that allowed new students to discuss areas of concern with senior students, and a professionalism and time management workshop. Rateau found that first semester retention rates were 95.5%. Prior first semester retention rates were not identified in the literature. Rateau also mentioned that the orientation program presented faculty with an opportunity to expand and transform their teaching methods to meet the needs of their students.

Fontaine (2014) found that the implementation of a group of intervention retention services increased the 150% time to completion rates for associate degree nursing students by 10%. The researcher was not, however, able to determine any specific or combination of interventions that influenced retention. The retention program included tuition stipends, learning communities, a comprehensive orientation, academic

planning, counseling, peer tutoring, and a nurse mentor component. The orientation program was a two-day event to welcome students into the program, set expectations, and review success strategies, all of which aligned with Tinto's conditions to improve retention (Fontaine, 2014). Orientation ranked second behind peer tutoring in the mean satisfaction score which indicated the students appreciated the information and found it a valuable use of their time. Fontaine suggested that more research was needed to determine best practices for retention programs for associate degree nursing students.

#### New Graduate Nurse Orientation

Many of the same concerns that faculty have for new nursing students are also experienced by nursing students as they transition from the student nurse role into the role as a professional nurse. Penprase (2012) surveyed accelerated second-degree nursing program graduates approximately three months after they graduated from their programs. According to Penprase, lack of confidence, time management issues, and lack of knowledge were three main areas of concern for the new nursing graduates. Students indicated that preceptorship with practicing nurses while in school, employee orientation programs, and the acceptance and support of their new peers were very important to their successful transition into the workforce (Penprase, 2012). A strong new nurse orientation program that includes support, feedback, and expectations can provide a strong foundation for new nurses to successfully persist in their new environment.

Salera-Vieira (2009) found that using a nurse educator as a clinical instructor for the first few days of orientation was a successful way to transition new nursing graduates

into their roles as graduate nurses. The collegial clinical model of one instructor for several students was employed to meet the orientation objectives of increasing the comfort level of participants, assisting the preceptors, and saving money by retaining the new hires. The study was based on Vygotsky's sociocultural development theory concept of zone of proximal development. This concept explains learning as a scale from other-assisted to self-assisted learning to internalization. Other-assisted, or assisted performance, occurs when students learn through the guidance and support of a more experienced individual (Sanders & Welk, 2005). The next stage, self-assisted learning, places students in control of their learning. Internalization occurs when students are able to maintain their learning environment and no longer need a more experienced individual. As students are introduced to new environments, they can revert to previous stages in order to regain the state of internalization (Sanders & Welk, 2005).

Salera-Vieira's (2009) program included "modeling, feedback, questioning, instructing, and cognitive structuring" (p. 175) in order to assist the new graduates through the development process. Modeling and instructing were used during the other-assisted development stage, and feedback, questioning, and cognitive structuring were used in the self-assisted stage. The results of the study indicated that new graduates were able to care for patients on their first day with their preceptor instead of spending one day shadowing their preceptor. The nurse educator communicated with the preceptors so that the orientation experiences were continued through the preceptorship program. The study was limited by its implementation in one unit at one hospital. It was also limited as the new program was evaluated by only four new graduate nurses and their preceptors.

Further research is needed in this area to determine if the collegial clinical model is a beneficial way to transition new nursing graduates into practice.

Duchscher (2008) used Kramer's process of transition to professional practice for nursing graduates to mark the stages of role transition for this population. The first stage, the honeymoon phase, typically lasts about three months in which graduates are "excited and exhilarated...disoriented and disillusioned" by their "adjustment to their new roles and responsibilities" (Duchscher, 2008, p. 442). The last stages, recovery and resolution, return the new nursing professional to a state of balance (Kramer & Schmalenberg, 1978). Duchscher (2008) described the first phase as including an orientation that involved new expectations and responsibilities and the need to "fit in" with the culture. New graduates were "divided between the demanding professional adjustments. . . and the sociocultural and developmental changes" (Duchscher, 2008, p. 445). The environment could also be used in describing the experiences and feelings of students making the transition into college or into a specific program.

Doody et al. (2012) surveyed 116 fourth-year, baccalaureate nursing students concerning their perceptions of the role transition process and how the program prepared them. A majority of the responses came from students 20-23 years of age (69%). Just over half (53%) of the students indicated that the program prepared them for the nursing role. With regard to a statement concerning students' opportunities to develop nursing skills, there was a distinct difference of opinion between age groups. A total of 63% of the 23 years and younger group agreed with the statement compared to 43% of those aged 24 or older. Students also indicated the need for regular, constructive feedback



from coworkers and managers in order to ease the transition from student nurse to practitioner (Doody et al., 2012).

Tastan et al. (2013) found that first year experiences within the profession were critical in influencing new graduate nurses' professional satisfaction and decision to continue in the profession. New nursing graduates working in a Turkish military hospital (n = 234) were surveyed about their transition to the professional role. More than half (54.7%) of the respondents indicated they thought about quitting the profession, and more than half (56.2%) indicated their orientation only met some of their expectations. An orientation program, especially personalized to the new graduate's needs, was considered to be a significant variable in a successful transition into practice. It was also important for the new graduates have a positive, professional socialization experience during their first year of employment. Tastan et al. (2013) also indicated the importance of nurse educators in preparing new graduates for their transition to professional practice through orientation programs.

### Summary

The review of literature has shown that though orientation programs have a long history in higher education, it has only been within the last 30 years that researchers began evaluating orientation as a retention tool for institutions (Mack, 2010). Orientations in the workplace have been implemented, primarily, to improve the retention of new employees. As orientation professionals and researchers shared their findings, orientation programs matured in their content to support the needs of students as they

transitioned into new environments and new roles. By evaluating previous student participation in orientation programs and noting their success, the use of orientation programs to prepare students for college has been supported. The expansion of orientation programs to specific student populations has created a need for further research to determine if orientation can be used to predict student success for these specific populations. This dissertation was designed to determine if there is an association between a program-specific orientation and the first-year retention rate of associate degree students and if an orientation program can be a predictor of adult student success.

## CHAPTER 3 METHODOLOGY

### Introduction

The literature review conducted for this study has shown that orientation programs can improve student performance, persistence, and graduation rates for community college and first-time undergraduate students, and new graduate nurses (Busby et al., 2002; Pascarella et al., 1986; Penprase, 2012; Zeidenberg et al., 2007). There has been a lack of research on the association of orientation programs and first-year retention rates of associate degree nursing students. Research has also been limited on the predictive value of participating in a program-specific orientation program and first-year retention rates of traditional-age and adult associate degree nursing students. The purpose of this study is to contribute to the literature by evaluating a program-specific orientation for associate degree nursing students.

This study was framed in the positivist paradigm. The ontological nature of the paradigm focuses on the law-like, stable external reality of the subject (Blanche & Durrheim, 1999). The researcher objectively evaluated the results and did not interact with the participants. The quantification of retention was measured using variables that have been used in other studies of orientation programs. By using these accepted variables, the results of this study can be used to expand the literature on the use of orientation programs to promote student retention.

A quasi-experimental design was used as there is a lack of randomization of the intervention, and there is a lack of a true experimental control over all variables that

could influence the results of the study (Campbell & Stanley, 1963). According to Campbell and Stanley, every experiment has imperfections, but it is the responsibility of the researcher to evaluate the validity of the study to be “aware of the residual imperfections in his design so that on the relevant points he can be aware of competing interpretations of his data” (p. 34). Quasi-experimental designs have become an accepted way to test hypotheses. The results of these research designs do not prove or confirm a theory. Rather, results allow the researcher to reject or fail to reject the hypothesis. Quasi-experimental designs provide researchers with the ability to investigate hypotheses when more efficient designs, such as experimental, are not feasible (Campbell & Stanley, 1963).

Changes in educational research have encouraged the use of quantitative research to develop evidence-based policy and practice (Gorard, 2001). Large-scale experimental trials can be costly and time prohibitive, but the use of secondary data has changed researchers’ ability to conduct this type of research. Gorard (2001) indicated that quantitative research provides only part of the larger picture of the research process.

A majority of the research in the area of orientation programs has been quantitative, and there has been limited research focused on associate degree nursing students. The present study was designed to follow the current literature and provide evidence of an association between orientation programs and retention in this population of students. The large number of adult learners in nursing education provided the impetus for identifying whether a program-specific orientation program is a good

predictor of first year retention rates for this group of students. Future research recommendations are discussed in Chapter 5.

### Research Questions

This study was guided by the following research questions that address first-year retention rates of associate degree nursing students:

1. What is the mean difference in first semester final grades between students who participated in the orientation program and those students who did not participate in the orientation program?
2. What is the association between participation in a program-specific orientation program and the first-year retention rate of newly admitted associate degree nursing students?
3. Can the first-year retention rate of newly admitted associate degree nursing students be predicted by participation in a program-specific orientation program and the age of the student (traditional and adult)?
4. What is the association between participation in a program-specific orientation program and the persistence to graduation of newly admitted associate degree nursing students?

### Population and Setting

The focus of this study was 376 students who were admitted to an associate degree nursing (ADN) program in a Florida state college between January 2011 and August 2012. These students were part of four cohort groups, two groups of students (*N*

=199) who were admitted prior to the implementation of the program-specific orientation (January and August 2011) and two groups of students ( $N = 177$ ) who were admitted and attended the program-specific orientation program (January and August 2012).

The institution's nursing program is considered limited access, requiring minimum admission standards and a selection criteria for admission. Students must have completed all of the prerequisite course work (eight courses) with a minimum GPA of 2.50 and have scored at least 73% on the TEAS<sup>®</sup> test, a nationally standardized admission test for nursing programs, to be eligible for consideration. Students with the highest GPA and test scores are admitted to the program. The application pool during the time of the study was larger than the number of available seats so the selection criteria was implemented to select candidates for acceptance into the program. Limited-access is a common practice of nursing programs in the geographic area of the study institution due to the large number of applicants for the nursing program. During the time of the study, there were no changes in the admission criteria for the program.

The institution was selected for the study because it implemented a program orientation for new associate degree nursing students admitted in January 2012. The orientation program was held in November and December 2011 and July 2012 for the two orientation cohort groups, January 2012 and August 2012. The program-specific orientation, offered to students prior to starting their nursing course work, was implemented with the goal of improving student retention in order to meet a growing need for RNs in the area. There has been a critical need for RNs in the area with employment projected to grow 19% through 2022, faster than all other occupations

(Employ Florida, 2014). Approximately 200 students in the study population had completed the first year of nursing school prior to the implementation of the program orientation.

Students admitted to the nursing program in January and August 2012 were mandated as part of their admission requirements to attend a three-day orientation program that was held on campus for three-hours each week over a three-week period. Two sessions on the same topic were offered each week to accommodate variations in student schedules. Participants had the option of attending an afternoon or evening session. Attendance was taken at each session. The orientation sessions focused on professionalism, academic success, and diversity. The topics selected for the orientation program were determined by the faculty based on their experiences and understanding of the challenges of new nursing students. All sessions were taught by full-time tenure-track or tenured faculty members with the same faculty members presenting a topic for both sessions. Some sessions included current nursing students as group facilitators. The orientation session topics introduced new students to a variety of support services at the institution and incorporated interactive activities designed to encourage involvement and interactions between new students, current students, and the faculty (see Appendix B).

In the event of unexpected absences, each session had an alternate assignment that could be completed in place of attending the session. These alternate assignments were necessary, as the content covered in the orientation was required to be presented to each student admitted to the program for program accreditation documentation. The alternate assignments varied by session (e.g., a recording of the session with a quiz or a brief

literature review with questions). All alternate assignments were designed to meet a majority, if not all, of the objectives of the session. Students who completed the alternate assignments were included in the study as they had been exposed to the content of the orientation. Only students who were newly admitted to the nursing program were included in the study. Students who had been unsuccessful in a nursing course and were repeating the first semester of the program were removed from the study as they had already experienced the role of the student nurse.

The curriculum of the nursing program remained constant for the four cohort groups that were included in this study. As shown in Table 5, the course sequence was slightly different between the fall and spring admitted students. In order to limit potential differences based on the curriculum sequence, a cohort of fall and spring admits was included in the orientation and no orientation groups.



Table 5

*Curriculum Sequence for the Nursing Program*

Semester	Fall Admit	Spring Admit
1	Fundamentals of Nursing Pharmacology in Nursing Care	Fundamentals of Nursing Pharmacology in Nursing Care
2	Basic Medical Surgical Nursing Mental Health Nursing	Basic Medical Surgical Nursing
3	Maternal Newborn Nursing Pediatric Nursing	Mental Health Nursing Pediatric Nursing
4	Advanced Medical Surgical Nursing	Advanced Medical Surgical Nursing Maternal Newborn Nursing
5	Complex Medical Surgical Nursing	Complex Medical Surgical Nursing
6	Practicum	Practicum

Data Collection Plan and Analysis

A request for data was submitted and approved by the institution's Office of Institutional Effectiveness and Research for class rosters for Fundamentals of Nursing and Pharmacology in Nursing Care for the following semesters: January and August 2011, and January and August 2012. Students who were enrolled in both courses remained in the study. Students who were not enrolled in both courses were evaluated to determine if they were returning nursing students who were enrolled in a NUR-prefix course in a prior semester. Returning students were removed from the study as they already had experience as student nurses due to their prior enrollment.

Once eligible students were determined from the four cohort groups (two cohorts prior to offering orientation and two cohorts after mandating orientation), an analysis of the admission criteria (GPA of the prerequisite coursework and the score on the TEAS<sup>®</sup> test) was completed to identify any significant differences between the cohorts.

In order to determine first-year retention, class rosters from Maternal Newborn Nursing, Pediatric Nursing, and Mental Health Nursing were compared to the first semester rosters as illustrated in Table 6. Students who were not enrolled in both third semester courses were not considered retained, because they did not follow the standard curriculum sequence of the program.

Table 6

*First-year On-time Retention for August and January Cohorts*

First Semester Courses	Enrollment Semester	Third Semester Courses	Enrollment Semester
<i>Before Orientation</i>			
Fundamentals of Nursing Pharmacology in Nursing Care	Spring 2011	Mental Health Nursing Pediatric Nursing	Fall 2011
Fundamentals of Nursing Pharmacology in Nursing Care	Fall 2011	Maternal Newborn Nursing Pediatric Nursing	Summer 2012
<i>After Orientation</i>			
Fundamentals of Nursing Pharmacology in Nursing Care	Spring 2012	Mental Health Nursing Pediatric Nursing	Fall 2012
Fundamentals of Nursing Pharmacology in Nursing Care	Fall 2012	Maternal Newborn Nursing Pediatric Nursing	Summer 2013

The Nursing Department provided the orientation attendance rosters, proof of any alternate assignments for the orientation workshops, and the numerical value of the student's final grade in Fundamentals of Nursing. Students who were missing any one of the workshops were removed from the study. All nursing courses at the institution are web-enhanced, and all test and assignment grades, including the final numerical grade, are posted in the online Learning Management System for dissemination to students. Archived final course grade information was retrieved by eLearning personnel as the information was not readily available in the nursing department. All data was analyzed using SPSS 23.0.

### Research Design

This quantitative, retrospective study was used to determine the association between a program-specific orientation program and the first-year retention rate of associate degree nursing students. The data were also evaluated to determine if participating in the program-specific orientation program is a predictor for first-year retention of adult associate degree nursing students. The researcher also evaluated if there was a difference in final numerical grades for the first semester Fundamentals of Nursing course between students who attended orientation and those who did not attend orientation. This course was selected for evaluation as it shows a student's successful transition into their role as a nursing student after the first semester of the program. There was no attempt in this study to establish a cause and effect. Because extraneous variables that may affect between-group differences cannot be controlled, the researcher

conducted a causal-comparative analysis. The limitation is due to an inability to manipulate the independent variable and the non-randomization of the groups (Schenker & Rumrill, 2004).

This type of study is similar to the research presented in the literature review and is intended to enhance the body of research in the orientation program area and inform the field of nursing education. The first research question was evaluated using an independent *t*-test to determine if the population means were similar. The independent variable was whether the student attended orientation and the dependent variable was the students' final numerical grade for the Fundamentals of Nursing course. Because there is limited research on the association of an orientation program for associate degree nursing students and the published research provides conflicting results (Fontaine, 2014; Rateau, 2001), a two-tailed test was conducted to analyze the data.

There are three assumptions about the dependent variable that must be met to use the independent *t*-test. The dependent variable must be normally distributed within the two populations, the population variances must be equal, and there must be independence between the groups (Lomax & Hahs-Vaughn, 2012). Levene's test was used to determine the homogeneity of variances. The alpha level was set at 0.05. The confidence interval was evaluated to determine the rejection of the null hypothesis (no difference in final numerical grade for Fundamentals of Nursing course) or a failure to reject the null hypothesis. Cohen's *d* was used to determine effect size, with 0.2 indicating a small effect size, 0.5 indicating a moderate effect, and 0.8 a large effect size. G\*Power software was used to determine the power of the test. The power of a test is

influenced by “the difference between the population means, the amount of variability in the population, and the size of the samples” (Stone, 2010, p. 10). If the assumption of normality is not met, depending on the assumption of homogeneity of variances, the independent *t*-test was used with ranked scores to analyze the data.

Regarding the second research question, the two groups of students, orientation and no orientation, were evaluated using a Chi-square Test of Association to determine “whether there is an association or relationship between two or more categorical variables” (Lomax & Hahs-Vaughn, 2012). A Chi-square Test of Association was conducted to determine if there is an association between participation in the program-specific orientation and first-year retention rates in the nursing program.

There are two assumptions that must be met to use the Chi-squared Test of Association: (a) observations must be independent; and (b) the expected frequency in each cell must be at least five (Lomax & Hahs-Vaughn, 2012). The first assumption, independent observations, was met as students who were repeating nursing courses were removed from the study. This can increase the probability of a Type I error (Lomax & Hahs-Vaughn, 2012).

The dichotomous independent variable was whether the nursing student participated in the orientation program, and the dependent variable was whether the student was retained after the first year of the nursing program. If there is an association between the two variables, a regression statistic was conducted to determine if participation in the orientation program can be used to predict the first-year retention rate of adult associate degree nursing students. Logistical regression must be used, as a

categorical outcome or dependent variable violates the assumption of linearity and normal distribution required in linear regression models (Lomax & Hahs-Vaughn, 2012).

Variables, descriptions, and coding are displayed in Table 7.

Table 7

Variables, Descriptions, and Coding

Variable	Description	Coding
Orientation	Student participated in the orientation program prior to starting nursing program.	0 = no orientation 1 = orientation
Age	Traditional-aged students are under 25 years old.  Adult learners are 25 years or older.	0 = traditional-age student 1 = adult learner
Retention	First-year retention in the nursing program is based on the standard curriculum sequence.	0 = not retained 1 = retained
Persistence	Persistence to graduation in the nursing program is based on the standard curriculum sequence.	0 = did not persist 1 = persisted

In the third research question, adult learner was treated as a dichotomous, moderating variable (adult or traditional-age learner). Moderating variables can affect the relationship between other variables and the dependent variable, or outcome, through an interaction effect (Frazier, Tix, & Barron, 2004). “The moderator effect is nothing more than an interaction whereby the effect of one variable depends on the level of another” (Frazier et al., 2004, p. 116). The importance of identifying moderating

variables is that it moves past establishing successful interventions to identifying which interventions are most effective for different groups of people (Frazier et al., 2004).

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_1 X_2 + \varepsilon$$

Y = predicted outcome

a = Y-intercept

$b_1 X_1$  = regression coefficient orientation independent variable

$b_2 X_2$  = regression coefficient student age moderator variable

$b_3 X_1 X_2$  = interaction

$\varepsilon$  = residual

(1)

In the fourth research question, a Chi-square Test of Association was conducted to determine if there is an association between participation in the program-specific orientation and persistence to graduation in the nursing program.

Table 8 shows the relationship between the research questions, the theoretical framework, and the data to be collected. Based on the curriculum design, students who were retained are assumed to have successfully integrated the part of the work role transition indicated in each research question. Each of the variables that influence work role transition were identified in one or more of the research questions. Also, both modes of adjustment prevalent in the early stages of work role transition are coded within each research question.

Table 8

*Relationship Between Research Questions, Theoretical Framework Variables and Modes of Adjustment, and Data*

Research Question	Theoretical Framework Variable and Mode of Adjustment	Data to be Collected
1. What is the mean difference in first semester final grades between students who participated in the orientation program and those students who did not participate in the orientation program?	Motivational orientation, prior occupational socialization, organizational socialization processes, role requirement <ul style="list-style-type: none"> <li>• Replication</li> <li>• Absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance at orientation or completion of alternate assignment</li> <li>• Numerical final grade value of first-semester course (Fundamentals of Nursing)</li> </ul>
2. What is the association between participation in a program-specific orientation program and the first-year retention rate of newly admitted associate degree nursing students?	Organizational socialization processes <ul style="list-style-type: none"> <li>• Absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance at orientation or completion of alternate assignment</li> <li>• Enrollment in third semester courses</li> </ul>
3. Can the first-year retention rate of newly admitted associate degree nursing students be predicted by participation in a program-specific orientation program and the age of the student (traditional and adult)?	Prior occupational socialization <ul style="list-style-type: none"> <li>• Replication</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance at orientation or completion of alternate assignment</li> <li>• Enrollment in third semester courses</li> </ul>
4. What is the association between participation in a program-specific orientation program and the persistence (graduation) of newly admitted associate degree nursing students?	Motivational orientation, prior occupational socialization, organizational socialization processes, role requirement <ul style="list-style-type: none"> <li>• Replication</li> <li>• Absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance at orientation or completion of alternate assignment</li> <li>• Completion of program</li> </ul>



### Authorization to Conduct Study

The authorization to conduct this study was approved by the Institutional Research Board (IRB) of institution where the data was collected and the Institutional Review Board (IRB) at the University of Central Florida (UCF). The institution's IRB follows federal mandates in reviewing and approving all proposals that involve human research to "ensure the rights and safety of human subjects are protected" (Procedure 1.5000). The UCF IRB "is a committee established to protect the rights and welfare of human participants involved in research" (UCF, n.d.). Appendix C includes the IRB approval documents from both institutions.

All individuals conducting research with human participants must complete the Collaborative Institutional Training Incentive (CITI), an online research ethics education program. Researchers conducting social or behavioral research must successfully complete courses in group 2. Examples of course content include: history, ethical principles, regulations, assessing risk, informed consent, privacy and confidentiality, and conflicts of interest. The CITI training requirement was completed in July 2013.

### Originality Score

The College of Graduate Studies requires submission of the dissertation to iThenticate. The chair of this dissertation submitted the manuscript to this system and discussed the results with the committee during the dissertation defense on March 21, 2016.

## CHAPTER 4 DATA ANALYSIS AND FINDINGS

### Introduction

Orientation programs have been used to improve student performance, retention, and persistence (Booker, 2006; Busby et al., 2002; Courage & Godbey, 1992; Gilmore & Lyons, 2012; Pascarella et al., 1986). There has been extensive research on the use of orientation programs for general college students (Green & Miller, 1998; Poirier et al., 2007; Wischusen et al., 2011), but the literature is limited in the use of orientation programs for associate degree nursing students (Fontaine, 2014; Rateau 2001). This study was intended to contribute to the literature on orientation programs for associate degree nursing students.

This chapter provides the statistical analysis results for the four research questions which guided the study. Data reported in this chapter were analyzed using SPSS Version 23.0 for Windows. All inferential tests were performed at the  $\alpha = .05$  significance level.

### Participants

The participants in this research study consisted of associate degree nursing students enrolled at a public state college in the state of Florida. Data for a total of 383 students were provided by the institution's institutional research office. The list of students was determined to be first-time nursing students who had not been enrolled in a prior nursing program. Of the 383 students, seven of the students who were admitted to the program in 2012 did not complete all three of the orientation workshops. These seven students were removed from the study as they did not meet the orientation attendance

criteria described in Chapter 3. A total of 376 students were included in the study: 199 prior to the orientation program implementation and 177 who participated in the orientation program. The demographic profile of the participants is presented in Table 9 with characteristics determined by the two groups and a total for each characteristic. The majority of the participants were female, with 16.5% being male or unknown. The ethnic background of the participants was primarily Caucasian. Non-traditional students (25 years old or older) made up a slightly higher percentage of the no orientation group.

Table 9

*Participant Demographic Data (N = 376)*

Characteristics	No Orientation		Orientation		Total	
	N	%	N	%	N	%
Orientation	199	52.9	177	47.1	376	100.0
Age						
Traditional	90	45.2	89	50.3	179	47.6
Non-traditional	109	54.8	88	49.7	197	52.4
Gender						
Female	163	81.9	150	84.7	313	83.2
Male	35	17.6	27	15.3	62	16.5
Unknown	1	0.5	0	0.0	1	0.3
Race						
White	112	56.3	96	54.2	208	55.3
Black	26	13.1	28	15.8	54	14.4
Hispanic	34	17.1	32	18.1	66	17.6
Asian	17	8.5	16	9.0	33	8.8
Mixed (two or more)	6	3.0	3	1.7	9	2.4
Unknown	4	2.0	2	1.1	6	1.6

An independent *t*-test analysis was completed to determine any differences in the prerequisite GPA and TEAS<sup>®</sup> scores between the orientation and no orientation groups. The prerequisite GPA and TEAS<sup>®</sup> scores were the major measures used to select candidates for admission to the nursing program studied in this research. The mean prerequisite GPA was very similar for the orientation and no orientation groups with the mean for both groups being 3.479 and the standard deviations of the two groups varying by less than one 100<sup>th</sup> of a point. The results of the independent *t*-tests analysis support the descriptive statistics results in that there was no statistical difference between the orientation and no orientation groups for the prerequisite GPA ( $t = .001, df = 374, p = .999$ ). The 95% confidence interval for the difference between means was  $-.069$  and  $.069$ , thus the null hypothesis that there is no difference in prerequisite GPA for the two groups cannot be rejected. The descriptive statistics for prerequisite GPA are shown in Table 10.

Table 10

*Descriptive Statistics for t-Test, Prerequisite GPA Admission Criteria (N = 376)*

Admission Criteria	M	SD	95 % Confidence Interval	
			Lower Limit	Upper Limit
Prerequisite GPA				
No orientation (N = 199)	3.479	.344	3.431	3.527
Orientation (N = 177)	3.479	.336	3.429	3.528

*Note.*  $t = .001, df = 374, p > .05$

Three students in the no orientation group did not have valid TEAS<sup>®</sup> score in their file so they were removed from the TEAS<sup>®</sup> score analysis. The TEAS<sup>®</sup> score was slightly higher for the no orientation group (M = 81.244, SD = 4.518) than the orientation group (M = 80.485, SD = 4.765). The results of the independent *t*-tests analysis support the descriptive statistics results in that there was no statistical difference between the orientation and no orientation groups for the TEAS<sup>®</sup> score ( $t = 1.579, df = 371, p = .115$ ). The 95% confidence interval for the difference between means was -.186 and 1.70, thus the null hypothesis that there is no difference in TEAS<sup>®</sup> scores for the two groups cannot be rejected. The descriptive statistics for the TEAS<sup>®</sup> score are shown in Table 11.

Table 11

*Descriptive Statistics for t-Test, TEAS<sup>®</sup> Score Admission Criteria (N = 373)*

Admission Criteria	M	SD	95 % Confidence Interval	
			Lower Limit	Upper Limit
TEAS <sup>®</sup> score				
No orientation (N = 196)	81.244	4.518	80.607	81.880
Orientation (N = 177)	80.485	4.765	79.778	81.192

*Note.*  $t = 1.579, df = 371, p > .05$

### Research Question 1

Research Question 1 sought to determine if the average final numerical score of a first semester nursing course would differ depending on student participation in orientation. The numerical grade was used instead of an alphabetical grade, as the institution in this study does not have plus or minus letter grades, which would limit the

ability to find differences between the groups. The research question was analyzed using an independent *t*-test for orientation participation and the final grade in Fundamentals of Nursing, a first semester course in the nursing program. Six students were not included in the analysis as they withdrew from the course and did not receive a final grade (three from the no orientation group and three from the orientation group). The test was conducted using an alpha of .05. The null hypothesis was that the population means for the first semester grades were equal, and the alternate hypothesis was that the population means for the first semester grades were not equal.

As shown in Table 12, the assumption of normality was tested for the distributional shape of the dependent variable for the no orientation group (N = 196). Review of the Shapiro-Wilk's test for normality ( $SW = .942, p < .05$ ), skewness (-1.034) and kurtosis (2.248) statistics indicated non-normality (Table 13). The histogram and the normal Q-Q plot suggested some non-normality. The boxplot suggested five potential outliers.

Table 12

*Shapiro-Wilk's Test of Normality for Orientation and No Orientation Groups*

Course Grade	Statistic	df	<i>p</i>
Includes outliers (N = 370)			
No orientation	.942	196	.000
Orientation	.718	174	.000
Outliers removed (N = 358)			
No orientation	.979	191	.005
Orientation	.993	167	.569

When the outliers were removed, the assumption of normality was retested for the distributional shape of the dependent variable for the no orientation group (N = 191). As shown in Table 13, the skewness (-.241) and kurtosis (-.711) statistics indicate that normality may be a reasonable assumption for the distributional shape of the dependent variable for the no orientation group. The histogram was indicative of a normal bell shaped curve, and the points adhered relatively closely to the diagonal line of the normal Q-Q plot. Although the Shapiro-Wilk's test for normality (Table 12) was still statistically significant after the outliers were removed ( $SW = .979, p < .05$ ), independent *t*-tests are relatively robust to violations of the normality assumption with samples of size 10 or more (Lomax & Hahs-Vaughn, 2012). It was therefore deemed appropriate to proceed with conducting the analysis.

Table 13

*Skewness and Kurtosis for Orientation and No Orientation Groups*

Course Grade	Skewness	SE	Kurtosis	SE
<b>Includes outliers (N = 370)</b>				
No orientation	-1.034	.174	2.248	.346
Orientation	-4.004	.184	28.312	.366
<b>Outliers removed (N = 358)</b>				
No orientation	-.241	.176	-.711	.350
Orientation	-.093	.188	-.370	.374

*Note.* SE = Standard Error

The assumption of normality was tested (Table 12) for the distributional shape of the dependent variable for the orientation group ( $N = 174$ ). Review of the Shapiro-Wilk's test for normality ( $SW = .718, p < .05$ ), skewness ( $-4.004$ ) and kurtosis ( $28.312$ ) statistics indicated non-normality (Table 13). The histogram and the normal Q-Q plot suggested some non-normality. The boxplot suggested six potential outliers.

When these outliers were removed, the assumption of normality was tested and met for the distributional shape of the dependent variable for the orientation group ( $N = 167$ ). Table 12 for the Shapiro-Wilk's test for normality ( $SW = .993, p > .05$ ), and Table 13 of the skewness ( $-.093$ ) and kurtosis ( $-.370$ ) statistics indicate normality. The histogram was indicative of a normal bell shaped curve and the points were adhering relatively closely to the diagonal line of the normal Q-Q plot. The plots in aggregate suggest evidence of normality. Although the plots for both orientation and no orientation generally suggested some departure from normality, the results were anticipated to be relatively robust given that a two-tailed test was being used.

Levene's test indicated that the assumption of homogeneity of variances was met ( $F = .134, p = .706$ ). Table 14 shows the test was statistically significant,  $t = 3.671, df = 365, p < .05$ . No orientation students had higher course grades ( $n = 191, M = 89.734, SD = 3.746$ ) than orientation students ( $n = 167, M = 88.273, SD = 3.770$ ).



Table 14

*Descriptive Statistics for t-Test, First Semester Course Grade by Orientation Attendance (N = 358)*

Orientation Attendance	M	SD	95 % Confidence Interval	
			Lower Limit	Upper Limit
No orientation (N = 191)	89.734	3.746	89.200	90.267
Orientation (N = 167)	88.273	3.770	87.700	88.849

*Note.*  $t = 3.671$ ,  $df = 356$ ,  $p < .05$ .

The 95% confidence interval for the difference between means was .678 and 2.244. The effect size was calculated by  $d$  (specifically the difference in means divided by the pooled standard deviation) and found to be .194. This indicated that there was less than one standard deviation unit of difference in course grades of orientation students as compared to no orientation students. This is generally interpreted to be a small effect.

The results provided limited evidence to support the conclusion that there was a difference in the first semester final grade between students who participated or did not participate in orientation. Students who did not attend orientation had, on average, a higher final grade as compared to orientation students.

### Research Question 2

Research Question 2 sought to determine if there was a relationship between first-year retention rate and participation in orientation. The research question was analyzed

using a chi-squared test of association for orientation participation and first-year retention rate (N = 376). The test was conducted using an alpha of .05. It was hypothesized that there was an association between the two variables.

The assumption of an expected frequency of at least five per cell was met. The assumption of independence was not met because the students were not randomly selected; thus, there was an increased probability of a Type I error.

Table 15 indicates that 88.8% of the students were retained in the first year. Individuals who attended orientation were retained at a slightly higher percentage (89.3%) than students who did not attend orientation (88.4%). There appeared to be no association or relationship between first-year retention rates and attending orientation. This was supported based on the chi-squared test ( $\chi^2 = .064$ ,  $df = 1$ ,  $p = .800$ ). Thus, the null hypothesis that there is no association between attending orientation and the first-year retention rate failed to be rejected. In this sample, there appeared to be no relationship between attending orientation and the first-year retention rate.

Table 15

*Chi-squared Analysis of First-year Retention Rate for Orientation and No Orientation Groups*

Retention Rate	No Orientation	Orientation	Total
<b>Not retained</b>			
Count	23	19	42
Expected count	22.2	19.8	42.0
% within orientation	11.6%	10.7%	11.2%
Residual	.8	-.8	
Standardized residual	.2	-.2	
Adjusted residual	.3	-.3	
<b>Retained</b>			
Count	176	158	334
Expected count	176.8	157.2	334.0
% within orientation	88.4%	89.3%	88.8%
Residual	-.8	.8	
Standardized residual	-.1	.1	
Adjusted residual	-.3	.3	

Note.  $\chi^2 = .064$ ,  $df = 1$ ,  $p > .05$

The standardized residuals suggest that students who attended orientation were slightly more likely to be retained (standardized residual = 0.8) as compared to students who did not attend orientation (standardized residual = -0.8). The adjusted standardized residuals suggest students who attended orientation were slightly more likely to be retained (adjusted standardized residual = 0.3) and slightly less likely to not be retained (adjusted standardized residual = -0.3). Students who did not attend orientation were slightly more likely to not be retained (adjusted standardized residual = 0.3) and slightly less likely to be retained (adjusted standardized residual = -0.3). The effect size, or

Cohen's  $w$ , was computed to be .013 which is interpreted to be a very small effect (Cohen, 1988).

### Research Question 3

Research Question 3 sought to determine if orientation participation was a good predictor of first-year retention and if student age moderated the prediction. Student age was treated as a moderator because there have been inconsistent results in the literature as to how student age influences student performance. The research question was analyzed using hierarchical multiple regression to determine if orientation participation as well as the addition of student age to the model would be a good predictor of first-year retention rate. Hierarchical multiple regression was used in order to test the effects of each predictor independently. Table 16 indicates that the variability in the first-year retention rate was not accounted for by orientation participation ( $R^2 = .000$ ) or the addition of the student age variable ( $R^2 = .022$ ).

Table 16

*Model Summary of First-year Retention Rate Predicted by Orientation Participation and Student Age*

Model	R	$R^2$
Orientation predictor	.022	.000
Orientation and student age predictors	.048	.022

Table 17 provides support for the previous statement in that neither the regression model with the orientation variable,  $F(1, 374) = .064$ ,  $p > .05$ , or the regression model with the orientation and the student age moderator variable,  $F(2, 373) = .500$ ,  $p > .05$ , predicted first-year retention rate at a statistically significant level. The coefficient table information was not included because neither variable was determined to be significant.

Table 17

*ANOVA Table for Orientation and Orientation and Age (as Moderator) Variables*

Model	SS	df	MS	F	<i>p</i>
Orientation					
Regression	.006	1	.006	.064	.801
Residual	37.302	374	.100		
Total	37.309	375			
Orientation and student age					
Regression	.100	2	.050	.500	.607
Residual	37.209	373	.100		
Total	37.309	375			

*Notes.* SS = Sum of Squares, MS = Mean Square

Student age was also evaluated as a covariate to determine if there would be any difference in the results. The results of the analysis are displayed in Table 18. The two-way ANOVA analysis was included to identify the possibility of an interaction effect between orientation participation and student age. There was homogeneity of variances, as assessed by Levene's test for equality of variances,  $p = .375$ . The analysis determined that student age was not a good predictor of first-year retention rate,  $F(1, 372) = 1.013$ ,  $p$

> .05, and the interaction between orientation participation and student age was also not significant,  $F(1, 372) = .573, p > .05$ .

Table 18

*Between-subject Effects for Orientation and Age (as Covariate) Variables*

Source	Type III SS	df	MS	F	<i>p</i>
Corrected model	.157 <sup>a</sup>	3	.052	.524	.666
Intercept	294.631	1	294.631	2950.151	.000
Age	.101	1	.101	1.013	.315
Orientation	.006	1	.006	.055	.815
Age * Orientation	.057	1	.057	.573	.449
Error	37.152	372			
Total	334.000	376			
Corrected total	37.309	375			

Note.  $R^2 = .004$  (Adjusted  $R^2 = -.004$ ). SS = Sum of Squares, MS = Mean Square.

Research Question 4

Research Question 4 sought to determine if there was a relationship between orientation participation and persistence to graduation. The research question was analyzed using a chi-square test of association for orientation participation and persistence (N = 376). The test was conducted using an alpha of .05. It was hypothesized that there was an association between the two variables, attending orientation and persistence to graduation.

The assumption of an expected frequency of at least five per cell was met. The assumption of independence was not met because the students were not randomly selected; thus, there was an increased probability of a Type I error.

Table 19 shows that 76.1% of the students persisted. Individuals who attended orientation persisted at a slightly higher percentage (77.4%) than students who did not attend orientation (74.9%). While there appeared to be an association or relationship between attending orientation and persistence, statistical analysis did not support this finding ( $\chi^2 = .328, df = 1, p = .567$ ). Thus, the null hypothesis that there is no statistical association between attending orientation and persistence failed to be rejected. In this sample, there appeared to be no statistical relationship between attending orientation and persistence.

Table 19

*Chi-squared Analysis of Persistence Rate for Orientation and No Orientation Groups*

Persistence Rate	No Orientation	Orientation	Total
<b>Did not persist</b>			
Count	50	40	90
Expected count	47.6	42.4	90.0
% within orientation	25.1%	22.6%	23.9%
Residual	2.4	-2.4	
Standardized residual	.3	-.4	
Adjusted residual	.6	-.6	
<b>Persisted</b>			
Count	149	137	286
Expected count	151.4	134.6	286.0
% within orientation	74.9%	77.4%	76.1%
Residual	-2.4	2.4	
Standardized residual	-.2	.2	
Adjusted residual	-.6	.6	

Note.  $\chi^2 = .328, df = 1, p > .05$

The standardized residuals suggest that students who attended orientation were slightly more likely to persist (standardized residual = 2.4) as compared to students who did not attend orientation (standardized residual = -2.4). The standardized residuals suggested that students who did not attend orientation were slightly more likely to not persist (standardized residual = 2.4) as compared to students who attended orientation (standardized residual = -2.4).

The adjusted standardized residuals suggested that students who attended orientation were slightly more likely to persist (adjusted standardized residual = 0.6) and slightly less likely to not persist (adjusted standardized residual = -0.6). Students who did not attend orientation were slightly more likely to not persist (adjusted standardized residual = 0.6) and slightly less likely to persist (adjusted standardized residual = -0.6). The effect size, or Cohen's  $w$ , was computed to be .0328 which is interpreted to be a very small effect (Cohen, 1988).

### Additional Analyses

Because three of the four research questions yielded non-significant results, the researcher examined the four cohort groups individually by research question variable to determine if there were any differences between the cohorts that could explain the research questions results. Regarding Research Question 1, the range in first semester course scores for the no orientation cohorts, Spring 2011 (Range = 15.14) and Fall 2011 (Range = 15.85), were similar and lower than the two orientation cohorts, Spring 2012 (Range = 19.20) and Fall 2012 (Range = 17.08). This would indicate a more cohesive



group of course scores for the no orientation students than the orientation students and would affect the statistical analysis. Table 20 displays the descriptive statistics for first semester grades for the four cohort groups.

Table 20

*Descriptive Statistics of Cohort Groups by First Semester Course Grade (N = 358)*

Course Grade	No Orientation		Orientation	
	Spring 2011	Fall 2011	Spring 2012	Fall 2012
Mean	90.101	89.351	88.429	88.294
Standard deviation	3.827	3.700	4.108	3.671
Minimum	81.30	79.78	76.83	80.03
Maximum	96.44	95.63	96.03	97.11
Range	15.14	15.85	19.20	17.08
Median	90.66	89.43	88.68	88.31

For Research Question 2, when the four cohorts were evaluated separately regarding first-year retention rates, there was a drastic difference between the two no orientation groups. As shown in Table 21, Spring 2011 (86.9%) and Fall 2011 (90.5%) first-year retention rates were higher than both of the orientation groups: Spring 2012 (88.2%) and Fall 2012 (89.2%). Upon further investigation, the researcher identified a possible confounding variable in the implementation of a tutoring program that started in Summer 2011 that may explain the results. This would have allowed the Fall 2011 and later cohorts the opportunity to utilize the full-time, tenured faculty tutor throughout their entire nursing curriculum. More information on the confounding variable is discussed in Chapter 5.

Table 21

First-year Retention Rates by Cohort Group (N = 376)

	No Orientation		Orientation	
	Spring 2011	Fall 2011	Spring 2012	Fall 2012
First-year retention rate	86.9%	90.5%	88.2%	89.2%

In the analysis of data to respond to Research Question 3, the four cohorts were evaluated separately for first-year retention rate by student age. As shown in Table 22, when first-year retention rates were assessed by student age, there was a difference between traditional and non-traditional students. As reflected in Table 21, the drop in first-year retention rates between Fall 2011 and Spring 2012 were the product of the drop in first-year retention rate of non-traditional students (from 87.9% to 83.3%), whereas traditional students increased their first-year retention rate by 1% (from 93.6% to 94.6%) during the same time period. This illustrates why it is important to scrutinize the data in order to identify variables that can influence statistical results based on variable groupings. First-year retention rates for traditional and non-traditional students varied by 0.5% to over 11% depending on the cohort year. This information can be the basis for future research studies as well as student success program implementation for students in certain demographic groups.

Table 22

*First-year Retention Rates for Cohort Groups by Student Age (N = 376)*

Student Age	No Orientation		Orientation	
	Spring 2011	Fall 2011	Spring 2012	Fall 2012
Traditional	89.1%	93.6%	94.6%	89.4%
Non-traditional	84.2%	87.9%	83.3%	88.9%

*Note.* Traditional = 25 years old or younger. Non-traditional = over 25 years old.

Regarding Research Question 4, the four cohorts were evaluated separately regarding persistence to graduation rates, and an extreme difference between the two no orientation groups, Spring 2011 (70.2%) and Fall 2011 (79.0%) was found. The results of the analysis are displayed in Table 23. The Fall 2011 group's first-year retention rate was, however, higher than both of the orientation groups, Spring 2012 (76.5%) and Fall 2012 (77.5%). As stated earlier, the researcher identified a possible confounding variable in the implementation of a tutoring program that started in Summer 2011 that may explain the results.

Table 23

*Persistence to Graduation Rates for Cohort Groups (N = 376)*

Cohort Group	No Orientation		Orientation	
	Spring 2011	Fall 2011	Spring 2012	Fall 2012
Persistence rate	70.2%	79.0%	76.5%	77.5%

### Summary

The findings of the study have been reported in this chapter. A total of 376 students were included in the study. Of those, 199 did not participate in the orientation program, and 177 did participate in the orientation. The majority of students were female Caucasian students. The percentage of non-traditional students was higher in the no orientation group (54.8%) when compared to the orientation group (49.7%).

The first research question investigated the relationship between attending orientation and first semester grades. There was a significant difference in the first semester grades of the two groups,  $t = 3.671$ ,  $df = 365$ ,  $p < .05$ , with students who did not attend orientation having higher grades, on average, than the orientation group. There was less than one standard deviation unit difference (.194) in course grades of orientation students as compared to no orientation students, indicating a small effect or magnitude of difference. Additional analysis indicated a larger range of course scores for the orientation group (19.20 and 17.08) when compared to the no orientation course grade range (15.14 and 15.85). The median course grade was also lower for the two orientation cohort groups (88.68 and 88.31) when compared to the orientation cohort median grades (90.66 and 89.43). Further discussion about this result is discussed in Chapter 5.

The second research question examined the relationship between attending orientation and first-year retention rates in the nursing program. There was no significant difference between the orientation and no orientation groups,  $\chi^2 = .064$ ,  $df = 1$ ,  $p > .05$ . Although the statistic was not significant, the residuals indicated that the orientation group was more likely to be retained than the no orientation group. Additional analysis

indicated there was a difference between the two no orientation groups, Spring 2011 (86.9%) and Fall 2011 (90.5%). The Fall 2011 group first-year retention rate was higher than both of the orientation groups, Spring 2012 (88.2%) and Fall 2012 (89.2%). A potential confounding variable (tutoring program) was identified that may have influenced the results of this study. Research to support this statement is discussed in Chapter 5.

The third research question explored if the first-year retention rate could be predicted by participation in the orientation program. Student age was analyzed as a moderator to determine if there was a difference between traditional and non-traditional students,  $F_{(2, 373)} = .500, p > .05$ . Student age was also analyzed as a covariate and yielded a result that was not significant ( $F = 1.013, p > .05$ ). The interaction between orientation participation and student age was also not significant ( $F = .573, p > .05$ ). Additional analysis indicated a difference in first-year retention rates between traditional and non-traditional students, with traditional students having a more consistent first-year retention rate over the four cohort groups. It appeared that the non-traditional students performed better in the fall curriculum sequence and that traditional students were not influenced by the difference in curriculum sequences. This may be of interest to program administrators as they review course organization for the program.

The fourth research question examined the relationship between attending orientation and persistence in the nursing program. There was no significant difference in persistence between the orientation and no orientation groups,  $\chi^2 = .328, df = 1, p > .05$ . Although the statistic was not significant, the residuals indicated that the orientation

group was more likely to persist than the no orientation group. Additional analysis indicated a difference between the two no orientation groups, Spring 2011 (70.2%) and Fall 2011 (79.0%). The Fall 2011 group first-year retention rate was higher than both of the orientation groups, Spring 2012 (76.5%) and Fall 2012 (77.5%). These results may have been influenced by the tutoring program that was implemented in Summer 2011, allowing the Fall 2011 and later cohorts the opportunity to utilize this additional resource in their journey to graduation.

The additional analyses of the cohort groups regarding each research question variable identified differences between the cohorts that would have been recognized by informal inferences, but additional statistical analysis did not yield results that were different from grouping the cohorts by orientation participation. These results led the researcher to question why she was not able to determine a relationship between orientation, retention, and persistence.

In Chapter 5, the researcher also identifies some additional analyses that may provide information as to how orientation might relate to students in other demographic groups not investigated in this study. Additionally, the researcher examines the results of the study as they relate to the literature, discusses unanticipated results, and provides implications for practice.

## CHAPTER 5 DISCUSSION

### Introduction

This study was conducted to explore the relationship between a program-specific orientation program and associate degree nursing student academic performance, retention, and persistence. The measures in this study were selected to align with the transition as student makes as they move from a college student to a nursing student. Students entering a nursing program bring with them attributes they acquired in their prior occupational socialization experiences and based on their motivational orientation. As the student begins their journey in nursing school, they must absorb and internalize new attributes to become a successful nursing student. Students are exposed to and hopefully acquire these new attributes through the organizational-socialization process as well as during the changes in the role requirement. Depending on the individual student's prior experiences, they may need to learn and absorb more skills, behaviors, attitudes, and values in order to successfully transition into the role of the student nurse and be retained in the program. In this chapter the researcher provides a brief summary of the research study, examines the results of the study in relation to the literature, discusses unanticipated results, and provides a critique of the study. Future research and implications for practice are also discussed.

### Summary of the Research Study

Newly admitted students enrolled in the associate degree nursing program were included in this study. A total of 376 nursing students formed the convenience sample

for this quantitative research study. This retrospective study was focused on student performance, retention, and persistence to determine if the orientation program had any association with students' abilities to transition into their new role as student nurses. The following four research questions were explored in this study:

1. What is the mean difference in first semester final grades between students who participated in the orientation program and those students who did not participate in the orientation program?
2. What is the association between participation in a program-specific orientation program and the first-year retention rate of newly admitted associate degree nursing students?
3. Can the first-year retention rate of newly admitted associate degree nursing students be predicted by participation in a program-specific orientation program and the age of the student (traditional and adult)?
4. What is the association between participation in a program-specific orientation program and the persistence to graduation of newly admitted associate degree nursing students?

These questions were designed based on modifications made to Nicholson's (1984) role transition theory to analyze the role transition students make as they move from college students to nursing students. Nicholson's theory explains the variables that influence work role transition and the modes of adjustment individuals utilize to successfully transition into their new role. Table 8 on page 95 provides a graphical description of the



link between each research question, the theoretical framework, and the evaluation measure.

The research questions were developed after a comprehensive review of the literature concerning orientation programs in higher education. Although researchers have investigated orientation programs and student success in higher education (Derby & Smith, 2004; Green & Miller, 1998; Igbo et al., 2011; Sutherland et al., 2007; Zeidenberg et al., 2007), research has been limited on orientation programs for associate degree nursing students (Fontaine, 2014; Rateau, 2001). Therefore, this research was designed to contribute to orientation program research as it pertains to associate degree nursing students.

#### Results of the Study in Relation to the Literature

The first research question sought to determine if there was a mean difference in the first semester course grades between the orientation and no orientation groups. The study findings indicated a significant difference,  $t = 3.671$ ,  $df = 365$ ,  $p < .05$ , between the two groups, with the orientation group ( $n = 167$ ,  $M = 88.273$ ,  $SD = 3.770$ ) having a lower mean course grade than the no orientation group ( $n = 191$ ,  $M = 89.734$ ,  $SD = 3.746$ ). It should be noted that the difference in numerical grade would not have yielded a difference in alphabetical grade, as both average grades are equivalent to a grade of B for the nursing program in this study. Further analysis of the data showed that there was a wider range of scores for the orientation group (20.28) than the no orientation group (16.66) that would have influenced the significance of the statistic. A review of the

literature did not provide other instances of a reduction in course grades for students attending an orientation program, but other researchers found no significant difference in GPA between orientation and no orientation groups (Green & Miller, 1998; Hollins, 2009; Jesseph, 1966), with GPA being a direct measure of students' academic performance in their courses. Some possible reasons for these findings are discussed later in this chapter.

In regard to the second research question, there was a perception on the part of the researcher, based on anecdotal observations, that there would be a difference in retention rates between the orientation and no orientation groups. Also, various researchers and authors observed that there are differences in first-year retention rates for students who participate in an orientation program (Daniel, 2013; Derby & Smith, 2004; Fowler & Boylan, 2010; Glass & Garrett, 1995; Law, 2014). In contrast, other researchers (Atkins, 1978; Green & Miller, 1998) did not report any difference in first-year retention after an orientation program was implemented. The researcher did not anticipate that the limited-access nature of the program could potentially be an external variable that could affect the research findings. Prior research on orientation programs appears to have been focused on the general student population (Daniel, 2013; Derby & Smith, 2004; Jesseph, 1966; Pascarella et al., 1986) or underprepared students (Boylan & Saxon, 2013; Condon et al., 2013; Fowler & Boylan, 2010; Kimmel, 2000; Labun, 2002; Turner, 2013). The literature reviewed did not specifically identify the use of orientation programs for academically strong students to maintain strong student performance, retention, or persistence.

Chandler (1972) discussed the idea of student motivation as a factor in student success. The idea of motivation could also contribute to better student performance, or higher grades. Applying this idea to being admitted to an academically selective nursing school would make those highly motivated students with higher grades more likely to be admitted to a limited-access nursing program and continue to perform at an academically high level regardless of their participation in an orientation program.

In regards to the third research question, no association was found between first-year retention and orientation program attendance when moderated for student age. The literature review yielded conflicting results in regards to adult student retention. Owen (2003), and Kasworm and Pike (1994) both reported that adult learners had higher GPAs than their traditional-aged counterparts. In contrast, Glass and Garrett (1995) found no relationship between student age and GPA. Murtaugh et al. (1999) reported an increase in attrition with student age, but Fleming and McKee (2005) reported that adult nursing students who participated in an orientation program progressed in their nursing courses. Data for the present study were collected for students admitted in 2011 and 2012, which coincided with a major economic recession that affected the region of the study institution. Many non-traditional students must organize school, work, family, and other commitments. With approximately half of the students in this study being classified as non-traditional, it is possible that the state of the economy during the time of this study's focus influenced the results of the study (Wonacott, 2001).

Finally, for Research Question 4 there was a perception that there would be a difference in the persistence rate between the orientation and no orientation groups.

Substantiated in the literature review were improvements in the persistence rate for students who participate in an orientation program (Busby et al., 2002; Derby & Smith, 2004; Sutherland et al., 2005; Zeidenberg et al., 2007). Though Fontaine (2014), in studying associate degree nursing students, reported higher persistence rates, the increase could not be associated with the orientation program or any of the other retention interventions in the study. With orientation programs varying in length (Mack, 2010; Rentz, 1988), it is unknown if orientation directly affects persistence rates. It may be more likely that orientation programs provide students with a strong foundation early in their academic careers on which they can build as they progress (Jacobs, 2010). Orientation programs can provide students with the tools and guidance needed to make a successful transition into college (Robinson et al., 1996). By gaining the skills, values, behaviors, and attitudes required of successful college students early in their academic pursuits, orientation programs provide students with the ability to further develop these positive attributes as they move through their academic journeys.

In summary, with the exception of first semester course grades, the results of this study did not result in any significant differences between the orientation and no orientation groups. The theoretical framework that was the basis of this study, Nicholson's Work Role Transition Theory (1984), was that individuals transitioning from college student to nursing student could be assisted in this process through an orientation program. Orientation programs are designed to assist students by setting and explaining expectations, integrating individuals into their new environment, and promoting confidence (Robinson et al., 1996). From the results of this study it would appear that the

nursing students in this sample were able to replicate or quickly absorb the attributes needed to be successful in the nursing program without the orientation program. In the following sections, unanticipated results of the research are discussed, and suggestions are made regarding next steps for research in the area of orientation programs for associate degree nursing students.

### Unanticipated Results

Upon review of the findings of the study, several unanticipated results were apparent. First, the findings that students who attended orientation had lower course grades than students who did not attend the orientation was concerning. One of the challenges with retrospective research is that it can be difficult to identify potential external variables that could influence the results. In this situation, potential external variables could have been (a) changes in the course curriculum, (b) the way content was presented to students, (c) how students were evaluated for their course grade, (d) differences in the faculty teaching the content, or (e) variability in the students in each cohort. Any one of these variables could have provided a potential explanation of the findings. For this reason, this study was designed as a correlation and not a causation study. The limitations of a retrospective or post-implementation study is that causation cannot be applied to the findings. There is also the possibility that other cohorts of students could have provided different results (Newall et al., 2014). There was some support for this statement when each cohort was evaluated individually. The no

orientation Fall 2011 cohort demonstrated higher first-year retention and persistence rates than the other three cohorts.

Lastly, it was not anticipated that the program admission criteria could be a potential major influence on the findings of the study. Future research with other associate degree nursing programs that have different admission criteria could yield more clarity than was observed in this study. More correlational research on orientation programs for associate degree nursing students is needed to confirm the findings of this study before possible experimental studies to determine causation are warranted. The results of this study provide only an initial baseline for further study or as Campbell and Stanley (1963) stated, “a preliminary survey of the hypotheses, and those which survive this can then be checked through the more experimental manipulation” (p. 64). Based on the research of Fontaine (2014), Rateau (2001), and this study, there are still research studies that need to be conducted to determine if orientation programs should be considered a best practice for associate degree nursing programs.

#### Critique of the Study

A critique of the study is the challenge of using historical data. Some students were removed from the study because accurate data could not be retrieved from their records. Because some data were unavailable for analysis, it is possible that underrepresented or marginalized students were removed from the study. This could have affected the findings. Non-centralized, limited control over data maintenance by

potential researchers hinders the conduct of retrospective studies in that participants must be removed from the study population due to a lack of data.

A possible confounding variable may involve the researcher, who coordinated the orientation program for the nursing department. The idea of the orientation program was shared with and supported by the faculty prior to its implementation in 2012. It is possible that the researcher and faculty began utilizing some of the planned orientation information unintentionally prior to the January 2012 admitted class through one-on-one meetings with students or during classes in order to provide assistance to students who were not performing at an adequate level to be successful in the program. This practice could have inadvertently influenced the retention and persistence of the cohorts prior to orientation implementation.

Another potential confounding variable was that a full-time tenured faculty member was provided released time to provide individual tutoring sessions to students in the program. The faculty tutor began offering appointments in May 2011. The cohorts used in this study began their programs in 2011 and 2012. Thus, these groups of students would have been the target cohorts of students because they were in the early semesters of the program. This provided an ideal time to modify time management, and study and testing skills to promote success in the program (Tower et al., 2015). If the researcher did not have a close relationship with the faculty, this potentially influential variable may not have been revealed.

Additionally, the lack of significant differences for a majority of the research questions may be due to the nature of the admissions process for the program in this

study. Students admitted to the nursing program at this institution are academically stronger than the general college population. Future research of orientation programs and academically strong students in the general student population would provide additional findings that would support or refute the possibility that orientation may not be strongly associated with academically strong student performance.

Another critique of the study is that the orientation topics were determined by the faculty based on their perceptions of student needs. It is possible that the faculty's perceptions did not accurately capture actual student needs in an orientation program. Future research could be conducted to identify any mismatches between orientation topics and student needs. It is also possible that since the orientation program was a new intervention program, ongoing adjustments and assessments could better meet students' needs and result in positive findings. Finally, the possibility exists that this population of students was unique and therefore provided unique results. Additional research in this area would be needed to confirm this statement. The next section identifies some potential topics for future research that could provide additional support for or refutation of the results of this study.

### Implications for Practice

This study brought to light findings on how orientation correlates with associate degree nursing student performance, retention, and persistence. Although research into the orientation program in this study did not yield significant differences between the orientation and no orientation groups, the study provides support that orientation



programs may not be as effective for students who have a history of high academic performance in college prior to being admitted to a limited access, associate degree nursing program. Even though students do not know if they will be accepted into the nursing program, they are already taking on some of the role requirements of the student nurse in how they perform in their course work and admission tests. There is also the possibility that the orientation program was more beneficial for certain demographic groups of students that may be marginalized or underrepresented in this institution's program. Several research studies (Condon et al., 2013; Igbo et al., 2011; Kimmel, 2000; Labun, 2002; Melillo et al., 2013) utilized orientation programs to promote the performance, retention, and persistence of marginalized or underrepresented groups of nursing students. Additional investigation of the students in this study who were not retained or did not persist may yield insights into students with specific characteristics that may benefit from an orientation program.

Further investigation is warranted on the topic in associate degree nursing programs that are not limited access or that may accept new college students. By expanding the research findings from studies of programs with different admission requirements and diverse student populations, program administrators may be able to more clearly identify how orientation programs in associate degree nursing programs correlate with student success.

Similar research with general population students might also provide insight into the practice of mandating orientation for all new students. The results of these types of studies could assist institutions that may struggle to support mandatory orientation

programs. If there is not a correlation between orientation and student success with strong academic students, the institution may want to revisit mandating orientation for this group of students. This type of change in institutional policy could potentially alleviate some of the financial burden of the orientation program.

### Recommendations for Future Research

Although this study failed to yield significant differences for most of the research questions, there are still questions about how students perceived the orientation program content as the beginning of their role transition into a nursing student. A potential follow-up study would be a qualitative study in which a diverse group of students is interviewed about their experience with the orientation program and how the students internalized the content as part of their transition from role of student to that of student nurse. This type of study may clarify the students' perspectives on the role transition process and the orientation program's influence on this process. The idea aligns with Caple's (1964) discussion about the rationale for orientation in that orientation should provide students with a way to self-evaluate their wants and goals which may change over time. Nicholson (1984) described this idea as motivational orientation in that "anticipations and experiences surrounding the [transition] event—particular expectations, emotions, purposes, and plans—will also influence how the new role is construed, selectively attended to, and enacted" (p. 183). With each student coming into the program with different expectations and motivations, a qualitative study could

provide insight in describing the students' personal role transition process and how the orientation program supported or failed to assist them in this process.

### Summary

This study intended to determine the association between a program-specific orientation program for associate degree nursing students and first semester course grades, retention, and persistence to graduation. Prior research of orientation programs for associate degree nursing students was limited and provided inconclusive findings in promoting student success (Fontaine, 2014; Rateau; 2001). A significant difference was identified in first semester course grades between the orientation and no orientation groups, with the orientation group having an average lower course grade. Possible confounding variables, such as the tutoring program, how the content was presented, and potential changes in course evaluation, were discussed. There were no significant differences found in the association between orientation participation and first-year retention rates or orientation participation and persistence to graduation. Data analysis determined that student age did not support the prediction of first-year retention rates based on orientation program participation. The results of this study suggest that there is no relationship between a program-specific orientation program for associate degree nursing students and their first-year retention and persistence to graduation rates.

APPENDIX A  
DEVELOPMENT OF GRAPHIC VISUALIZATION

Figures 5 and 6, which appear in the dissertation, have been used to illustrate the work role transition process. They were developed by the researcher using content from Nicholson's (1984) article describing the work role transition process. The content of both figures, including the variables that influence the work role transition, the modes of adjustment, and the outcomes, are the work of Nicholson (1984). The arrangement of the content, however, is the work of the researcher. Figure 6 is the researcher's visualization of Nicholson's (1984) work role transition process as it pertains to the process of a college student moving into the role of a nursing student. In order to better demonstrate the work role transition process, the researcher purchased non-commercial rights to use the graphics displayed in Figures 5 and 6 from Can Stock Photo Inc. per their end user license agreement.

APPENDIX B  
ORIENTATION PROGRAM DETAILS

A full-time tenured faculty member developed and presented each of the following workshop topics during the first year of the orientation program.

### Diversity

- Five dimensions of diversity
- Define the terms: diversity, cultural bias, cultural stereotyping, and ethnocentrism
- “Penguin” or a “Peacock” exercise
- Recommendations from college’s Diversity Council to continue informing and embracing diversity
- Components of the Cultural Sensitivity and Awareness Checklist (Seibert, P. S., Stridh-Igo, P., & Zimmerman, C. G. (2002). A checklist to facilitate cultural awareness and sensitivity. *Journal Of Medical Ethics*, 28(3), 143-146.)

### Professionalism

- Recognize unprofessional behavior in the classroom, the clinical setting, and online
- Describe appropriate attire for the classroom and clinical environment
- Understand the importance of privacy in the healthcare setting

### Academic Success

- Time management and organization

- Stress management and coping skills
- Study skills
  - Preparing for class
  - Class and clinicals
  - Study groups
  - Preparing for an exam
  - Practice for NCLEX-RN
- Test-taking skills
  - Test day
  - Testing techniques
  - Levels of test questions



APPENDIX C  
INSTITUTIONAL REVIEW BOARD APPROVAL



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### Approval of Human Research

From: UCF Institutional Review Board #1  
FWA00000351, IRB00001138  
To: Molly K. Yanni  
Date: December 02, 2015

Dear Researcher:

On 12/02/2015, the IRB approved the following human participant research until 12/01/2016 inclusive:

Type of Review: UCF Initial Review Submission Form  
Project Title: New Student Orientation and First Year Retention Rate of Associate Degree Nursing Students  
Investigator: Molly K Yanni  
IRB Number: SBE-15-11775  
Funding Agency:  
Grant Title:  
Research ID: N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30 days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form cannot be used to extend the approval period of a study. All forms may be completed and submitted online at <https://iris.research.ucf.edu>.

If continuing review approval is not granted before the expiration date of 12/01/2016, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 12/02/2015 12:09:12 PM EST

IRB Manager

As Chairman of Seminole State's Institutional Review Board, I consider your study Exempt from IRB review based on standard 4, research involving the collection or study of existing data, documents, or records. You are encouraged to proceed with data gathering and analysis using records from Seminole State's students.

Please let me know if you need anything else – good luck!

Mark

Dr. Mark W. Morgan  
AVP, Institutional Effectiveness and Research  
Seminole State College  
[100 Weldon Blvd](#)  
[Sanford, FL 32773](#)  
407.708.2224

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