NURSING STUDENT RETENTION

Understanding the Process and Making a Difference

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Nursing Student Retention

Understanding the Process and Making a Difference
Second Edition

Marianne R. Jeffreys, EdD, RN
To my son, Daniel W. Edley
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Preface

Nursing and multidisciplinary college faculty, advisors, counselors, administrators, graduate students, and organizations working with academically and culturally diverse nursing student populations are called upon to

- *Enhance* student success
- *Improve* retention and graduation rates
- *Reduce* attrition rates (drop out)
- *Facilitate* academic progression and swift entry into the workforce

These goals can seem daunting and overwhelming without appropriate resources. The new edition of *Nursing Student Retention and the Nursing Student Retention Toolkit* offer an indispensible ensemble of hands-on, user-friendly resources. Appropriate for all undergraduate levels and settings (diploma, ADN, BS, RN-BS, and accelerated BS), the book and toolkit end the struggle to find ready-to-use materials for

- *Recognizing* factors that restrict or support retention
- *Identifying and assisting* at-risk students
- *Designing* individualized, holistic strategies for diverse learners
- *Implementing* culturally competent teaching and advisement
- *Fostering* professional development
- *Creating* an inclusive environment
- *Applying* tools and strategies to make a positive difference in student lives
- *Evaluating* strategy outcomes

Users of the book and toolkit will find the following:

- A model to guide nursing student retention and success
- A guide for identifying and assisting at-risk students
- A wide selection of educational activities
- Chapters detailing the multidimensional factors influencing retention and success
- Chapters detailing retention and success strategies
Preface

- Introductory snapshot scenarios, vignettes, case examples, illustrations, tables, and assessment tools
- Interactive retention strategy design modules
- Questionnaires for measuring and evaluating risk factors, retention strategy effectiveness, student perceptions, and satisfaction
- Techniques for diverse learners

Based on the results of doctoral and postdoctoral grant-funded studies, practical teaching experience with academically and culturally diverse learners, and multidisciplinary literature, the book and toolkit provide resources and a wealth of information for all user groups.


Part I comprises nine chapters filled with information and action-focused resources to explore, understand, and apply essential background information about the multidimensional process of nursing student retention and success. Part II details strategies, providing case exemplars applicable across a variety of settings. The book’s final chapter (Chapter 15) presents future directions, a vision for tomorrow, and proposes implications for all educators.

Readers are encouraged to pause, reflect, and question throughout the book in order to gain new insights into the multidimensional process of student retention. It is hoped that these new insights, with their holistic and multidimensional approach, will revitalize interest in nursing student retention. The ultimate goal of this book is to motivate others to further explore student retention through continued educational, theoretical, empirical, and practical endeavors. Readers are invited to contribute new insights, creative ideas, innovative strategies, empirical designs, and theoretical inquiries as they embark on their journey toward promoting nursing student retention and success. Let’s make a difference!

KEY FEATURES AND HOW TO BEST USE THIS BOOK

This book and toolkit offer an ensemble of thoughtfully interconnected features in a lively, interactive, and informative fashion. Optimal benefits will be best achieved by using all the distinctive features together. A quick guide to readers on distinctive features and how to best use this book follows:

- Opening Quotation: Readers are asked to pause and reflect on the quotation. Later, after completing the chapter, readers are asked to reflect on the quotation again. What does it mean? How is it significant?
• **Snapshot Scenario:** A realistic scenario prompts readers to read on and discover what the multidisciplinary literature says about the issue and what solutions are available. Readers are asked to reflect on the scenario before proceeding into the chapter. What are the major points? What new information do you seek?

• **Chapter Content:** Provides a wealth of new information and evidence-based strategies reported in the nursing and higher education literature. Readers can ease into and experience the abundance of literature without feeling overwhelmed. Integrated reflection exercise boxes strategically placed throughout chapters will aid in retaining important ideas and perspectives.

• **Key Point Summary:** Highlights three to five key summary synthesis points within the chapter.

• **Easy Application Steps:** Lists quick, easy steps for immediate application in any setting.

• **Educator in Action:** This vignette synthesizes chapter information and demonstrates direct application via realistic case exemplars.

• **Toolkit Resource Box:** Suggests toolkit items for use from the book’s accompanying Nursing Student Retention Toolkit most applicable to chapter content areas.

• **Discussion Questions:** An assemblage of questions that creatively blends chapter features and content in order to heighten awareness, deepen commitment, stimulate new ideas, and apply knowledge are found throughout all chapters. Readers are asked to answer each question individually and substantiate their answer from readings and activities in the book. Readers can then proceed to discuss questions and answers with a small group of peers, faculty, and/or administrators.

• **References:** Extensive journal and book references document relevant resources.

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**ABOUT THE NURSING STUDENT RETENTION TOOLKIT**

This book includes access to a valuable and ready-to-use Nursing Student Retention Toolkit for immediate use. The toolkit consists of four sets of tools and a total of 30 distinct items. The four sets are Questionnaires, Model and Illustrated Pathways, Assessment Tools, and Faculty Interactive Retention Strategy Design Modules. Taken together, the toolkit items provide a comprehensive set of materials for planning, implementing, and evaluating retention strategies and programs. These toolkit items may be used alone or in conjunction with other items and will be of use to a broad range of readers at all levels: full-time faculty, adjunct clinical faculty, administrators, association leaders, researchers, and graduate students. The toolkit and this book will enable you to enhance nursing student retention and success.
All these toolkit items are to be found on a special website. The address of the website is www.springerpub.com/JeffreysRetention. You can download and print the toolkit items from this website, and you can also distribute them electronically.

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What’s Happening? Exploring Student Retention and Taking Action

Part I is made up of nine chapters. Chapter 1 begins with an overview of student retention, defines key terms, and presents the Nursing Undergraduate Retention and Success (NURS) conceptual model as an organizing framework. The NURS model proposes that retention decisions will be based on the interaction of student profile characteristics, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors (OSP).

Chapter 2 describes student characteristics prior to beginning a nursing course and includes age, ethnicity and race, gender, language, prior educational experience, family’s educational background, prior work experience, and enrollment status. The chapter elaborates upon each of these characteristics, proposing ways that they may influence retention.

Chapter 3 introduces the general concepts underlying cultural values and beliefs, self-efficacy, and motivation that can seriously influence nursing student achievement, persistence, and retention. Several tables and figures illustrate major points significant for practical application in the educational setting. Select cultural values and beliefs, especially pertinent to nursing education and student retention, are compared and contrasted.

Nurse educators are continually challenged to appraise the influence of academic factors on retention and success. Chapter 4 discusses personal study skills, study hours, attendance, class schedule, and general academic services (college library, college counseling, and computer laboratory) in relation to undergraduate nursing student retention and aims to assist nurse educators in identifying areas of student strengths and weaknesses. An in-depth exploration of each academic factor reveals several dimensions that can potentially affect students. Special issues unique to nursing education are emphasized.

Chapter 5 presents external environmental factors that may influence students’ academic performance, retention, and/or success, and include financial status, family financial support, family emotional support, family responsibilities, child-care arrangements, family crisis, employment
hours, employment responsibilities, encouragement by outside friends, living arrangement, and transportation. Each environmental factor is analyzed in relation to undergraduate nursing student retention and aims to assist nurse educators in identifying areas of student strengths and weaknesses.

Chapter 6 proposes professional integration factors that enhance students’ interaction with the social system of the college environment within the context of professional socialization and career development. These factors include nursing faculty advisement and helpfulness, memberships in professional organizations, professional events, encouragement by friends in class, enrichment programs, and peer mentoring and tutoring. The chapter elaborates upon each of the professional integration factors, proposing ways that they can potentially and directly enhance retention through academic outcomes and psychological outcomes.

The complexity of the nursing educational experience offers unique professional, discipline-specific psychological and developmental opportunities and outcomes beyond course grades or GPA. Both academic and psychological outcomes influence persistence and retention. Chapter 7 addresses pertinent issues surrounding academic and psychological outcomes, presents proposed relationships with other variables in the NURS model, and suggests practical application strategies.

The purpose of Chapter 8 is to enhance awareness of OSF on student retention, highlight the potential significance of select factors, stimulate further inquiry, and suggest recommendations for nurse educators. OSF exist outside of the academic setting and the individual student’s personal environment and can influence retention. They include world, national, and local events; politics and economics; the health care system; nursing professional issues; and job certainty.

Chapter 9 introduces select background information and main concepts involved in retention decisions and the decision-making process. Nurse educators are in a strategic position to make a difference by facilitating the process of systematic decision making and enhancing opportunities for retention and success. Steps of the decision-making process specific to nursing student retention are additionally incorporated within an illustration. Implications for nurse educators are proposed.
Overview of Student Retention

The most persistent trend in student persistence research is that student attrition persists.

SNAPSHOT SCENARIO

PROFESSOR NUMBERS: I just don’t understand why we have such a high attrition rate, especially in the first nursing course. Students complete rigorous prerequisite courses prior to the nursing courses yet they still drop out or fail.

PROFESSOR PONDER: Yes, I don’t understand it either. Even when some students seem to be highly motivated and possess the critical thinking skills needed for nursing, they still aren’t successful.

PROFESSOR NUMBERS: It seems like our minority students drop out more frequently than our White students.

PROFESSOR ELLIS: Yes, except that some of the White students who are recent immigrants seem to have a more difficult time. Just like many of the minority students, these immigrants seem to keep to themselves inside and outside the classroom and clinical setting.

PROFESSOR PONDER: Recently, my classroom has become much more diverse. I have so many older students, men, students with full-time jobs, students caring for children, grandchildren, or aging and disabled family members, students who lived in various countries before coming to the United States, students who lost their jobs or are changing their careers because of the economy. I treat all students the same and use the same standards. So why are students dropping out, even though they have passing grades at midterm?

PROFESSOR NUMBERS: Changes in the economy have made nursing a more desirable career and many unemployed people are swarming nursing schools, desperate for admission. Once admitted, they aren’t always staying. That takes seats away from other students and contributes to the nursing shortage. Something should be done about this, but I don’t know where to begin.
PROFESSOR ELLIS: I was really surprised! Despite many of the obstacles and hardships that some of my students faced throughout the program, they persevered and were successful. I just can’t figure out what makes a positive difference for some students [and not others]. Wouldn’t it be wonderful if we could figure out why students stay, despite all their academic and personal challenges—and then help struggling students succeed—or even better—assist all students to enhance their learning and success and prevent struggles?

PROFESSOR PONDER: That would mean really understanding what’s going on with our students before planning strategies. Isn’t there a model that we can use to explore this? What strategies have others used that were successful? What works and what doesn’t and why?

The nursing profession must be ready to embrace a new age of realism with regard to the changing student population. Currently, the dramatic shift in demographics, the restructured workforce, and a less academically prepared college applicant pool have created a more diverse nursing applicant pool (1–9). Increasingly, the “nontraditional” student is replacing the “traditional” student in nursing. The projected increases in immigration, globalization, and minority population growth have the potential to enrich the diversity of the nursing profession and to help meet the needs of an expanding culturally diverse society (3,4,7–20). Thus, the untapped potential of the nontraditional student population demands focused attention on promoting nontraditional nursing student success. Unfortunately, the retention rates of nontraditional students have been, and still remain, substantially lower than those of traditional students (3,9,10,11,21–36). Although attrition is financially costly to students, educational institutions, and society, the severest impact can be the adverse psychological costs to the students (28,37–40). The mismatch between nursing student admissions and swift entry into the workforce adversely contributes to the nursing shortage, another severe effect that impacts the nursing profession, health care, and society (Table 1.1).

Enrollment trends, retention rates, professional goals, societal needs, and ethical considerations all declare the need to prioritize the retention of nontraditional students. However, the retention of traditional students must be addressed as well. Nurse educators are in a key position to influence retention positively. As active partners in the complex process of nursing student retention, nurse educators can design theoretical and evidence-based retention strategies targeting specific student populations. Design of a diagnostic-specific strategy first requires an understanding of the dynamic phenomenon of nursing student retention, the complex interaction of influencing factors, and insight into the student’s perspective (33,34,36,41).
TABLE 1.1 Select Nursing Student Trends and Potential Future Impact on the Nursing Profession

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SELECT NURSING STUDENT TRENDS</th>
<th>POTENTIAL FUTURE IMPACT ON THE NURSING PROFESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Consistent with global and multidisciplinary trends, the enrollment of older students in nursing programs has increased over the last decade, with projected increases to persist in the future.</td>
<td>Age at entry into the nursing profession will be older, resulting in decreased number of work years until retirement.</td>
</tr>
<tr>
<td>Ethnicity and race</td>
<td><strong>Enrollment</strong>: Recent nursing enrollment trends suggest a steady increase among some minority groups, however, no increase has been noted among Hispanic groups. <strong>Retention</strong>: Minority groups incur higher attrition rates than non-minority groups.</td>
<td>Currently, White, non-Hispanic nurses of European American heritage represent approximately 83% of all registered nurses in the United States. Mismatches between the cultural diversity in society and diversity within the nursing profession will persist into the future unless strategies for recruitment and retention are more successful.</td>
</tr>
<tr>
<td>Gender</td>
<td><strong>Men</strong>: Although the numbers of men in nursing are increasing, they remain an underrepresented minority (6%). <strong>Women</strong>: Support for women entering the workforce has shifted away from encouraging traditional female professions.</td>
<td>Men will continue to be disproportionately underrepresented in nursing. Many academically well-qualified male and female high school students with a potential interest in nursing may never enter the nursing profession.</td>
</tr>
<tr>
<td>Language</td>
<td><strong>Enrollment</strong>: Consistent with global and national trends in higher education, nursing programs in the United States and Canada have experienced an increase in English as second language populations over the past decade. <strong>Retention</strong>: English as second language student populations have unique learning needs and incur higher attrition rates.</td>
<td>Although individuals with personal lived experiences in other cultures and languages can potentially meet the needs of linguistically diverse and culturally diverse client populations, they will still be disproportionately represented within the nursing profession.</td>
</tr>
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<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SELECT NURSING STUDENT TRENDS</th>
<th>POTENTIAL FUTURE IMPACT ON THE NURSING PROFESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior educational experience</td>
<td>Consistent with trends in higher education worldwide, prior educational experiences are increasingly diverse with an academically less prepared applicant pool. Increases in the number of second-degree individuals have been noted. <em>Retention:</em> Academically under-prepared students incur higher attrition rates.</td>
<td>Nurses with degrees in other fields can enrich the nursing profession by blending multidisciplinary approaches into nursing. Nurses with academically diverse experiences may broaden the overall perspective, especially with socioeconomic and educationally diverse client populations.</td>
</tr>
<tr>
<td>Family's educational background</td>
<td>Nursing programs have also seen an increase in first-generation college students, especially among student groups traditionally underrepresented in nursing. <em>Retention:</em> First-generation college students incur higher attrition rates.</td>
<td>First-generation college students who become nurses have the potential to enrich the diversity of the nursing profession and reach out to various socioeconomic and educationally diverse client populations.</td>
</tr>
<tr>
<td>Prior work experience</td>
<td>A restructured workforce, welfare-to-work initiatives, displaced homemakers, popularity of midlife career changes, and health care career ladder programs have expanded the nursing applicant pool, increasing its diversity in prior work experience. Many students work full- or part-time. <em>Retention:</em> Work-family-school conflicts may interfere with academic success and retention.</td>
<td>New graduate nurses may enter the nursing profession with a variety of prior work experiences that have the potential to enrich the nursing profession.</td>
</tr>
<tr>
<td>Enrollment status</td>
<td>Almost half of all college students attend part-time. The number of part-time nursing students, especially those with multiple-role responsibilities (work, family) has increased. <em>Retention:</em> Work-family-school conflicts may interfere with academic success and retention.</td>
<td>Part-time students will take longer to complete their education. Entry into practice will be delayed and total number of potential work years in nursing will be decreased.</td>
</tr>
</tbody>
</table>

Reprinted from Jeffreys (2010).
Overview of Student Retention

multidimensional phenomenon of undergraduate nursing student retention and success. Application strategies conclude the chapter.

NEED, SIGNIFICANCE, AND DEFINITIONS

What are the various trajectory pathway options for retention and attrition?
How are various options defined?

Retention has been examined and discussed extensively in both higher education and nursing literature (28,42–46). Research studies, however, have been more limited and have targeted predominantly traditional students in traditional 4-year baccalaureate programs. In nursing, retention studies on new entry-into-practice programs (e.g., accelerated programs) are also limited (47). Many studies have focused on attrition through use of autopsy studies, after the student has already withdrawn. Diverse sample size, enrollment status, and methodology complicate synthesis of the literature. Although similar study variables have been examined, inconsistencies between operational definitions varied extensively, making comparison difficult (28,35,44). Additionally, voluntary attrition, due to personal reasons, and involuntary attrition, due to academic failure, are often undifferentiated (28,35,45). Tracking students via three different retention pathways (ideal, continuous, and interim/stopout), three attrition pathways (first semester failure, voluntary, and involuntary), and three licensure pathways is an important approach to document and comprehend the progress paths of nursing students today. Interestingly, the first study using this trajectory tracking pathway revealed that retention among nontraditional associate degree nursing students was almost equally distributed between ideal (26%), continuous (24%), and interim/stopout (25%). Brief stopouts for personal reasons were not predictors of failure. Rather brief stopouts could be beneficial; however, transitional interventions were recommended. Recognizing that not all students travel the same road yet still may achieve academic success and licensure is a valuable realization and a necessary first step toward understanding the multidimensional process of student retention (35). Figure 1.1 illustrates the student trajectory progression pathway. Key terms are presented in Exhibit 1.1.

What trajectory pathways have been used to track students in your course, other courses, and your program? How can clear, consistent definitions help track students within and between programs? What are the benefits of comparative retention studies?
MULTIDIMENSIONAL PROCESS OF STUDENT RETENTION

An extensive search in the nursing and higher education literature revealed several comprehensive conceptual models to explain undergraduate student attrition (21,26,48–51). However, only one model specifically targeted the nontraditional students (21). No models specifically targeted nursing students. What were common trends in the literature? The most persistent trend in student persistence research was that student attrition persists. Second, student attrition (or retention) was complex and multidimensional. Third, retention strategies needed to be evidence based, multidimensional, holistic, and evaluated quantitatively and qualitatively. Here,
EXHIBIT 1.1 Definitions Associated With Student Retention, Attrition, Progression, and Success

Nontraditional undergraduate nursing student refers to a nursing student who is enrolled in an entry-level undergraduate nursing program (diploma, associate degree, or generic baccalaureate) and who meets one or more of the following criteria: (1) 25 years or older, (2) commuter, (3) enrolled part-time, (4) male, (5) member of an ethnic and/or racial minority group, (6) speaks English as a second (other) language, (7) has dependent children, (8) has a general equivalency diploma, and (9) required remedial classes.

Traditional undergraduate nursing student refers to a nursing student who is enrolled in an entry-level undergraduate nursing program (diploma, associate degree, or generic baccalaureate) and who does not meet the criteria of “nontraditional undergraduate nursing student” as defined above. Specifically, such a student meets all of the following criteria: (1) 24 years or younger, (2) resides in campus housing or off-campus housing, (3) enrolled full-time, (4) female, (5) White and not a member of an ethnic and/or racial minority group, (6) speaks English as a first language, (7) has no dependent children, (8) has a U.S. high school diploma; and (9) required no remedial classes.

Course retention is the continuous enrollment in a nursing course without withdrawal.

Course success refers to passing the nursing course.

Program retention is the continuous enrollment in a nursing program (part- or full-time) by taking the required courses sequentially until meeting the program’s graduation requirements, possibly including courses repeated for previous withdrawal and/or failure.

In ideal program retention, the student successfully completes the required courses sequentially, in the specified time period, and without evidence of withdrawal or failure.

Interim program retention is the intermittent enrollment in a nursing program (part- or full-time) by taking the required courses sequentially until meeting the program’s graduation requirements, possibly including courses repeated for previous withdrawal and/or failure.

In program success, the student (1) successfully completes the program’s graduation requirements, (2) passes the RN licensing exam, and (3) obtains a part- or full-time job as an RN and/or enrolls in a more advanced nursing program.

In ideal program success, the student successfully completes the program’s graduation requirements within the specified time period.

(continued)
and, without withdrawing or failing, passes the RN licensing exam on the first attempt, and obtains a job as a RN and/or enrolls in a more advanced nursing program.

**Withdrawal** is when students officially withdraw from a college course or courses due to personal and/or academic reasons.

**Stopout** refers to a break in continuous enrollment for one or more semesters (excluding summer sessions and intercessions).

**Attrition** refers to students “dropping out” of the nursing program.

**Voluntary attrition** is when a student drops out due to personal (nonacademic) reasons compared to **involuntary attrition** because of academic reasons (failure or dismissal). It may also be helpful to differentiate between types of involuntary attrition for the purposes of tracking students, identifying at-risk transitional periods during the academic program, and evaluating effectiveness of retention strategies initiated. For example, in some nursing programs, failure in the first nursing course necessitates a reapplication process into the program with limited seats available for reapplicants. **First semester attrition** refers to attrition from students failing the first nursing course and who either do not apply for readmission or who apply for readmission but are not readmitted. Dismissal can occur for academic reasons, misconduct, academic dishonesty, and/or failure of one or more courses as reflected in the institution’s progression policy.

**holistic** means recognizing the student as a whole person with multiple roles, responsibilities, skills, knowledge, and feelings.

Subsequently, the Bean and Metzner model (21) of nontraditional undergraduate student attrition provided the underlying conceptual framework for the author’s early studies on nontraditional undergraduate nursing student retention (30,32–34). Results from these studies supported that nontraditional students often juggled multiple roles such as student, parent, financial provider, and/or employee and therefore were more influenced by environmental variables than by academic variables. Additionally, students perceived family, faculty, friends, tutoring, and an enrichment program as greatly supportive (33,34). Following the preliminary studies, a series of grant-funded multidimensional retention strategies were implemented and are described later in this book.

Although many of the factors influencing nontraditional students across various disciplines are also relevant to nursing students, there are some distinguishing characteristics of the nontraditional undergraduate nursing students. As a profession, nursing also is different from liberal arts and science disciplines; therefore, applicability of these models to undergraduate nursing students in general is also limited. Retention experts recommend more focus on discipline-specific programs,
nontraditional students, program completion time, student stopouts, and outcomes of education (52–54). Consequently, the Nontraditional Undergraduate Retention and Success (NURS) model was developed specifically for examining nontraditional undergraduate nursing student retention and success (55). The proposed influencing factors were clustered into variable sets and then incorporated into the original NURS model. With minor modifications, the original NURS model was easily adapted to include the traditional undergraduate nursing student population, resulting in the latest conceptualized model (Figure 1.2). Please note that in 2004, the acronym NURS was changed from “Nontraditional Undergraduate Retention and Success” to “Nursing Undergraduate Retention and Success” and encompasses components appropriate for both traditional and nontraditional students. Future reference to the NURS model in this book refers to the revised model. The latest NURS model is applicable to all entry-into-practice undergraduate nursing programs (associate degree, diploma, generic baccalaureate, accelerated second degree [baccalaureate]). It has also been effectively used to appraise retention in registered nurse-bachelor of science in nursing (RN-BSN) programs (56) and licensed practical nurse programs (57).

THE NURS MODEL: ASSUMPTIONS, PREMISES, AND OVERVIEW

The purpose of the NURS model is to present an organizing framework for examining the multidimensional factors that affect undergraduate nursing student retention and success in order to identify at-risk students, develop diagnostic-prescriptive strategies to facilitate success, guide innovations in teaching and educational research, and evaluate strategy effectiveness. Although several models have been proposed to examine college student attrition, this model specifically focuses on the aspect of retention (rather than attrition) and targets a specific student population. In other words, the emphasis is on exploring “why do nursing students stay?” as opposed to asking “why do nursing students leave?” The main goal of the model is to promote undergraduate nursing student retention and success. Educators in nursing and other college disciplines around the world have requested and used the model to first “explore the multidimensional process of student retention” and second “to take action and make a positive difference.” The model is tentative and will require modification when new data become available.

Based on a review of the literature and previous studies of nontraditional undergraduate nursing student retention, several assumptions underlie the NURS model:

- Undergraduate nursing student retention is a priority concern for nurse educators.
FIGURE 1.2 Jeffrey's (2004) Model of Nursing Undergraduate Retention and Success (NURS).
Student retention is a dynamic and multidimensional phenomenon that is influenced by the interaction of multiple variables (factors).

For undergraduate nursing students, environmental factors and professional integration factors greatly influence retention.

All students, regardless of prior academic performance, can benefit from professional socialization and enrichment throughout preprofessional and professional education.

Psychological outcomes and academic outcomes may interact and influence persistence.

The NURS model is presented in Figure 1.2. Briefly, the model indicates that retention decisions will be based on the interaction of student profile characteristics, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors. Table 1.2 defines

**TABLE 1.2 Definitions Associated With Jeffreys’s NURS Model**

- **Student profile characteristics**: describe student characteristics prior to beginning a nursing course and include age, ethnicity and race, gender, first language, prior educational experience, the family’s educational background, prior work experience, and enrollment status.

- **Student affective factors**: are students’ attitudes, values, and beliefs about learning and their ability to learn and perform the necessary tasks required for course and program success, including cultural values and beliefs, self-efficacy, and motivation.

- **Academic factors**: include personal study skills, study hours, attendance, class schedule, and general academic services (e.g., college library services, college counseling services, and computer laboratory services).

- **Environmental factors**: are factors external to the academic process that may influence students’ academic performance and retention and include financial status, family financial support, family emotional support, family responsibilities, childcare arrangements, family crisis, employment hours, employment responsibilities, encouragement by outside friends, living arrangements, and transportation.

- **Professional integration factors**: are factors that enhance students’ interaction with the social system of the college environment within the context of professional socialization and career development. These include nursing faculty advisement and helpfulness, professional events, memberships in professional organizations, encouragement by friends in class, peer mentoring and tutoring, and enrichment programs.

- **Outside surrounding factors**: are factors existing outside of the academic setting and the student’s personal environment that can influence retention such as world, national, and local events; politics and economics; the health care system; nursing professional issues; and job certainty.

- **Academic outcomes**: are represented by the student’s nursing course grade, cumulative GPA for nursing courses, and overall GPA.

- **Psychological outcomes**: include satisfaction and stress.

*Note: GPA, grade point average.*
key model components. Outside surrounding factors have the power to affect student persistence and retention either positively or negatively despite positive academic and psychological outcomes for nursing. At the beginning of each nursing course, student profile characteristics provide information on the composition of the student group. Individual factors may interact with each other to increase or decrease persistence or risk of attrition.

Similar to the Bean and Metzner model (21), it is presumed that environmental factors are more important for nontraditional undergraduate nursing students than academic factors. Also consistent with the model, academic outcomes interact with psychological outcomes. Good academic performance only results in retention when accompanied by positive psychological outcomes for the nursing program and profession. The voluntary and/or involuntary decision to remain in a course, persist in the nursing program, graduate, take the RN licensing exam, and enter the nursing workforce and/or begin a more advanced nursing program occurs during and at the conclusion of each nursing course.

Many models explaining attrition among traditional college students have emphasized the importance of social integration in college in student adjustment, persistence, and success (48–51). For undergraduate nursing students, a different perspective of social integration is proposed. In the NURS model, professional integration factors represent variables that enhance students’ interaction with the social system of the college environment within the context of professional socialization and career development. Several studies (33,34,36) consistently identified professional integration factors, such as nursing faculty advisement and helpfulness, an enrichment program, and peer mentoring-tutoring, as instrumental in assisting with nontraditional nursing student retention. Professional integration factors are at the center of the model because they are at the crossroads of the decision to persist, dropout, or stopout. It is also proposed that professional integration factors are important for traditional and nontraditional nursing student retention and for all types of nursing programs.

For example, the NURS model has applicability to undergraduates in RN-BSN programs (56); however, the manner in which factors influence student persistence is different. Basically this is true because RN-BSN students are nontraditional in the sense that they already have a professional license, do not enter baccalaureate nursing education directly after high school, most likely work full-time or part-time in the nursing profession, are older, and may have other responsibilities whereby the student role is not the main role. In addition, most students (except for diploma school graduates) have successfully completed college courses and a college degree. RN-BSN students are familiar with the college experience, may be strongly integrated and socialized within nursing (viewing nursing as an occupation or profession), and already have an established history
of success in college and in nursing (having earned a college degree and passed the RN licensing exam). The professional integration and socialization is at a different point for RNs pursuing their BS degree in nursing. Professional integration and socialization occurs differently throughout one’s career trajectory with advanced education and different practice roles; however, it is an irreplaceable, vital component.

In summary, within the NURS model, the proposed factors can be applied to both traditional and nontraditional undergraduate nursing student populations; however, the manner in which they impact retention may be different. Such differences will be highlighted throughout Part I of this book. Additionally, the factors interact with each other and with other variable sets in the NURS model. Such interactions will also be addressed throughout Part I.

In what ways is undergraduate nursing education different from other undergraduate majors? What are the various ways you can apply the NURS model?

**KEY POINT SUMMARY**

- The Nursing Undergraduate Retention and Success (NURS) model presents an organizing framework for examining the multidimensional factors that affect undergraduate nursing student retention and success in order to identify at-risk students, develop diagnostic-prescriptive strategies to facilitate success, guide innovations in teaching and educational research, and evaluate strategy effectiveness.
- The NURS model proposes that retention decisions will be based on the interaction of student profile characteristics, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors.
- Academic outcomes interact with psychological outcomes whereby good academic performance only results in retention when accompanied by positive psychological outcomes for the nursing program and profession.
- The voluntary and/or involuntary decision to remain in a course, persist in the nursing program, graduate, take the RN licensing exam, and enter the nursing workforce and/or begin a more advanced nursing program occurs during and at the conclusion of each nursing course.
- Professional integration factors are at the center of the model because they are at the crossroads of the decision to persist, dropout, or stopout.
APPLICATION STRATEGIES

EASY APPLICATION ACTION STEPS

Determining Retention, Attrition, and Licensure Rate

1. Obtain data for each trajectory pathway in Figure 1.1.
2. Develop a composite of your program’s trajectory pathway.
3. Propose percentages of increase or decrease for each pathway option.

Touring the Multidimensional Process of Nursing Student Retention and Success

1. Contemplate the big picture of the NURS model (panoramic view).
2. Beginning with student profile characteristics, consider the interaction between all model components and possible outcomes, noting that professional integration factors are at the center of the model.
3. Plan to explore each area more in depth by reading each book chapter.

EDUCATOR-IN-ACTION VIGNETTE

PROFESSOR LIGHT: As a follow-up to our discussion about nursing student retention, attrition, and success, and Professor Ponder’s query about finding a conceptual model to help us, I conducted a literature search and discovered the NURS model. Let me share with you the major parts and definitions.

PROFESSOR PONDER: What’s the best way to use the model? How should we begin?

PROFESSOR LIGHT: It’s really not any different than looking at a roadmap. Often, educators and institutions look at entry, progression, and graduation as a straight-line or a clear-cut pathway. Just like going from point A destination to point B destination may seem clear cut, there are many anticipated and unanticipated factors that can affect reaching a destination; by stopping the journey or by making it longer, shorter, more pleasant, and so on. The NURS model presents the big picture, or multidimensional nature of nursing student retention and success while also condensing the many variables (factors) influencing retention and success within variable sets (or boxes). The arrows really show movement and a method of connecting the dots (or boxes) with each other along the journey.

PROFESSOR NUMBERS: I like that the NURS model has corresponding quantitative questionnaires that we can administer to our students. We could use the Student Perception Appraisal-Revised (SPA-R) pretest and posttest to document what’s supporting their retention and what’s
restricting their retention. For students who dropout or stopout, we can use the withdrawal questionnaire. The questionnaire items correspond with concepts in the NURS model. We can aggregate data and explain it within the context of the NURS model.

PROFESSOR GRANT: I noticed that there are several large grants available to nursing programs that aim to enhance student retention and success, especially among underrepresented groups in nursing. We could use the NURS model and quantitative data to guide our grant proposal project by providing baseline data and then planning to evaluate changes from baseline data once our retention strategies are formulated. Several past grant recipients have developed retention strategies incorporating the professional integration and socialization factors depicted in the NURS model. For example, one school developed an enrichment program with peer mentor-tutoring, enhanced faculty advisement strategies, test prep workshops, an orientation program, development of a nursing student club affiliated with the National Student Nurses Association, and opportunities for participation in professional conferences. Another school developed a Nursing Neighborhood by converting space in the nursing building to incorporate various formal and informal group and individual peer mentor-tutoring and computer-based virtual learning activities exclusively for nursing students. Satisfaction is also a component within the NURS model, so satisfaction for retention strategies implemented can be measured by using or adapting a satisfaction questionnaire (Toolkit Items 6 and 7).

PROFESSOR NOVICE: All this is very interesting to me. I’m a new adjunct faculty member and I had no idea that so many factors could influence student success. The NURS model condenses everything into one picture. I realize that being a nurse practitioner with clinical expertise will not help me fully assist my students to be successful until I learn more about the teaching-learning process and how to help students succeed. I’m enrolled in a doctoral program and want to become a tenured professor someday. Now that Professor Grant mentioned funding available for nursing student retention research, I realize that educational research has been undervalued by many nurses involved in clinical research. We can’t improve quality of patient care unless we resolve the nursing shortage and we can’t do that if potentially good future nurses are dropping out. Perhaps I should focus my doctoral research on nursing student retention? I really want to make a positive difference in student retention.

PROFESSOR LIGHT: Several presenters at a national conference last year presented retention strategies implemented at their programs, documenting improved student retention rates, increased National Council Licensure Examination (NCLEX) pass rates, increased student satisfaction and confidence, and reduced stress. Some of the presenters used the NURS model
and the accompanying questionnaires. It was helpful to have a familiar model that linked concepts and variables within and between schools.

**TOOLKIT RESOURCE BOX**

Item 12—NURS Model  
Item 13—Nursing Student Progress Pathway  
Item 21—Who Are At-Risk Students?  
Items 1–4—Student Perception Appraisal Questionnaires—Pretests and Posttests

**DISCUSSION QUESTIONS**

1. In what ways can nontraditional nursing students enhance the nursing profession and help meet the needs of diverse patient populations?
2. A nursing faculty colleague states, “I treat all my students the same and I have the same expectations for each of them. I don’t know why I should change my approach just because our student population has changed. Our RN pass rate still exceeds the state average of 87%, even though our attrition rate has increased from 8% to 22% in the last 2 years.” (a) How does this statement make you feel? (b) How would you respond?
3. What are the benefits of using consistent definitions, evaluation measures, and conceptual model(s) in retention research and education?
4. Professor Green says, “What’s the difference between attrition research and retention research? Isn’t it asking the same question and getting the same answers?”
5. What aspect of the NURS model intrigued you the most? Why?

**REFERENCES**


