Cardinal Stritch University Stritch Shares

Master's Theses, Capstones, and Projects

3-1-2002

Admission criteria in the selection of graduate degree nurses

April M. Pellmann

Follow this and additional works at: https://digitalcommons.stritch.edu/etd



Part of the Nursing Commons

Recommended Citation

Pellmann, April M., "Admission criteria in the selection of graduate degree nurses" (2002). Master's Theses, Capstones, and Projects. 467. https://digitalcommons.stritch.edu/etd/467

This Thesis is brought to you for free and open access by Stritch Shares. It has been accepted for inclusion in Master's Theses, Capstones, and Projects by an authorized administrator of Stritch Shares. For more information, please contact smbagley@stritch.edu.

ADMISSION CRITERIA IN THE SELECTION OF GRADUATE DEGREE NURSES

BY

April M. Pellmann

A Master's Thesis Project

Submitted to Cardinal Stritch University College of Nursing

In partial fulfillment of the requirements for the degree

Master of Science in Nursing

Cardinal Stritch University

Milwaukee, Wisconsin

March 2003

CARDINAL STRITCH UNIVERSITY College of Nursing

THESIS/PROJECT DEFENSE COMMITTEE APPROVAL FORM

(date) may 14, 200 3

We hereby recommend that the project prepared by April M. Pellmann, RN, BSN entitled "Admission Criteria in the Selection of Graduate Masters Degree Nurses" be accepted as fulfilling this part of the requirements for the Degree of Master of Science in Nursing.

Committee:

Chairperson

Mayffatt Fid, D, and

Many E. Geverandy, P.D., RN, MCC

Accepted:

De Marey C. Ceverandy

ABSTRACT

ADMISSION CRITERIA IN THE SELECTION OF GRADUATE DEGREE NURSES

BY

April M. Pellmann

Master of Science in Nursing

Cardinal Stritch University College of Nursing

Milwaukee, Wisconsin

May 13, 2003

Dr. Ruth Waite, Chairperson

Abstract

The purpose of this descriptive quantitative study was to obtain data about the admission criteria and its rank importance to graduate nursing programs used by all accredited nursing schools. Accredited schools of nursing were either National League for Nursing Accrediting Commission (NLNAC) or Commission on Collegiate Nursing Education (CCNE) accredited, or both. A three-page questionnaire designed by the researcher was mailed to the deans or their designees of these 339 accredited programs. There were a total of 202 respondents for a response rate of 59.6% to the questionnaire. Data was collected and analyzed using the SPSS V-11® program. The findings of this study were that the following six admission criteria were critical for selection of graduate nurse applicants: grade point average (GPA); Graduate Record Examination (GRE); essay; interview; work history; and references. In addition, the top three in rank of importance with these criteria were GPA, references, and work history. The exception was nurse educator programs which ranked essay versus work history as the third most important criteria to admission. The conclusion of this study is that grades remain the most important criteria in the admission process. Further implications of this study include the potential to develop correlational studies based upon various graduate nurse programs and specific admission criteria.

100 Pr. 15

Dedication

I dedicate this work to my daughter, Elise, who never ceases to provide me with repeated inspiration and joy. She has been my constant in my life of change and adaptation, holding a place in my heart "to infinity and beyond."

I also wish to thank the following: Dr. Ruth Waite, who as the chairperson for my committee, for sharing her sage wisdom in edits, revisions and perseverance; Dr. Mary Ann Kathrein, for her limitless energy, enthusiasm, and "eagle eye"; Dr. Nancy Cervenansky, for demonstrating lessons of dignity and patience in coping with change; and, Sheryl Kelber, RN, MSN, who has taught me more lessons about faith and charity than she would ever give herself credit for.

To my family and friends who have endured the graduate school process with me for the last several years, I give my heartfelt thanks for your belief in my abilities and the kindness you never failed to offer.

Table of Contents

	Introduction	.3
	Background Information	.5
	Purpose of the Study	.6
	Research Questions.	.6
	Significance of the Study	.7
	Definition of Terms	.8
	Assumptions and Limitations of the Study	.9
	Summary	.11
Chapte	er II: Literature Review	
	Literature Review	.13
	Research Literature of the 1970's	.14
	Research Literature of the 1980's	.16
	Research Literature of the 1990's	.18
	Research Literature from 2000 to the present	.22
Chapte	er III: Methodology	
	Methodology	27
	Design	27
	Sample	28
	Protection of Rights of the Subjects	28
	Data Collection Plan	29

Chapter IV: Data Analysis

Data Analysis	31
Findings	33
Chapter V: Summary, Co	onclusions, and Recommendations
Summary	41
Conclusions	42
Recommendation	s45
References	47
Appendix A: Cov	ver Letter to Questionnaire51
Appendix B: Que	estionnaire53
Tables	
Table 1: Admissi	ion Criteria for Graduate Nurse Program33
Table 2: Mean R	ank of Admission Criteria by Types of Programs34
Table 3: Probation	onary/Conditional Students on Annual Basis35
Table 4: Probation	onary/Conditional Students Receiving Supportive
Services	s36
Table 5: Current	ly Using a Tool for the Admission Process37
Table 6: Percenta	age of Time Spent Admitting Graduate Students to
Progran	ı38
Table 7: Other P	ersonnel Involved in Admission of Graduate Students 30

CHAPTER I

Introduction

There is little conclusive evidence in existent literature regarding agreement on selective admission criteria that is critical to acceptance of students in graduate nursing programs. For those potential applicants, this information is important to know for their focus and preparation for future education in their chosen careers. For graduate faculty and administrators, this information is important to know for their time, budgets, and environmental allotments. This gap in knowledge prompted the researcher to question what type of admission criteria is presently being utilized for graduate nurse programs throughout the United States. There are currently no nationally accepted standard utilized as admission criteria. A candidate deemed unacceptable at one school may be accepted into another. Additionally, literature review demonstrates a need to explore whether any other criteria can effectively evaluate prospective graduate nursing students.

The goal of this study is to present the admission criteria used by graduate nursing programs so applicants may prepare themselves for successful admission to the program of their choice. This researcher also found an absence of research about graduate nursing faculty personal and professional ranking of admission criteria in the selection process of graduate nursing students.

For the past three decades in nursing research literature, the importance of admission selection criteria and its impact on time and finances has been a strong concern for graduate nurse programs. (Willingham, 1974; Sime, 1978; Hansen & Pozehl, 1995; Wilson, 1999). The time spent by faculty and other ancillary support

services for their involvement in the admission process, plus the money spent in funding educational testing and processing for prospective students, are seen as repeated themes in the literature over the past three decades. In response to these themes, some researchers have attempted to provide admission tools for saving labor, time and money (Munro, 1985; Hansen & Pozehl, 1995; Wilson, 1999). This researcher did not find these tools applied or adopted by other graduate nurse programs.

Some nursing researchers have discussed and reported in literature the selection of potential graduate students. These discussions have included: (1) the cost and efficiency of administering testing materials to prospective students; (2) the time spent by faculty selecting nursing graduate students to their specific programs, and (3) The availability of qualified faculty and other academic resources needed for students to complete the program.

With faculty and administration often under strict department financial constraints, the theme of time and material efficiency grows stronger. Meanwhile, there are more applicants than positions available in graduate nursing programs than in recent decades (Hansen & Pozehl, 1995). In addition, there is a current shortage of nurses in this country and there are increasing efforts to recruit and educate more nurses.

Because of this grave shortage of working nurses, there is a need for advanced prepared nurse faculty to teach in graduate programs (National Center, July 2002).

It is important to the discipline of nursing and future nursing practice that graduate nurse programs continue to thrive within this country. In addition to being educators, graduate nurses provide higher levels of knowledge and skill in specialized areas. They can adapt to ever changing health care environments and settings available

to meet the needs of individuals and their families. To ensure the growth, survival and success of these highly skilled nurses, graduate nurse programs must be able to succeed in competitive fiscal environments without sacrificing the quality and preparation in education necessary for present and future graduate nurses. The cost of the admission process for potential students is affected by the various areas of student/faculty ratio, student/faculty retention, screening/testing tools and availability of supportive services offered within the programs (Selleck & Gregory, 1994).

Background Information

Previous research into the admission and selection processes of graduate nurses is as varied throughout the country as is the scope of advanced practice and preparation for different role functions for a graduate nurse (Selleck & Gregory, 1994; Fuller, 1995; Wilson, 1999). The past three decades of nursing research literature shows that though similarities in admission criteria across programs are clearly evident, actual admission requirements have a wide variation. Some of these variations are seen in the use of a wide range of screening tests/tools to the acceptance of non-nurse or non-health care related degrees for graduate study in nursing.

This researcher's interest in the topic started before her own application to a graduate nurse program. Two years later as a graduate nurse student, another search into this topic again stimulated this researcher's personal interest when she reviewed an article about selected admission criteria for accredited graduate nurse programs which could predict successful completion (Hansen & Pozehl, 1995).

It is genuinely anticipated that this study will provide a basic foundation of descriptive information for potential applicants to graduate nurse programs as well as

faculty, researchers and administrators interested in this topic. Because some of existing nursing research expresses strong interest in specific admission instruments for use by faculty in graduate nurse programs, this study may also provide additional information for the consideration and development of such future endeavors (Burns et al, 1993; Rhodes, Bullough, & Fulton, 1994; Selleck & Gregory, 1994; Hansen & Pozehl, 1995).

Purpose of the Study

The purpose of this study is to investigate the admission criteria used by accredited nursing schools for admission to graduate nurse programs. The intention is to discover additional definitive data on the admission process and selection in accredited nursing schools within the United States. The future outcome of this study is for this data to serve as an aid to other nurse graduate applicants, students, faculty, researchers and administration.

Research Questions

In this descriptive quantitative study, the main research question is:

What are the current admission criteria utilized by accredited nursing schools nationally for admission to the Masters in Nursing programs?

Other questions in the development of this study include:

What are the admission criteria for each program?

What is the ranking of the importance of admission criteria utilized?

What is the single most important admission criterion?

What percentage of time is devoted by dean, faculty and support staff in admitting students to programs?

What percentage of students admitted to programs are admitted on a "probationary" or "conditional" status?

Do these type of students admitted receive any supportive services to complete the graduate nurse program?

Is a tool for decision making in selecting graduate students for admission to programs currently being used?

What percentage of time (dean or designee) is devoted to admitting graduate students to programs?

What percentage of time is devoted to admitting graduate students to programs by other personnel?

Significance of the Study

This study is significant to the discipline of nursing and future nursing practice for several reasons.

First, in recent decades, the number of applicants to graduate nurse programs has generally exceeded the number of positions available (Hansen & Pozehl, 1995). The number of these nurses who then complete programs continues to grow annually (American Association of Colleges of Nursing, 2001). This study will allow graduate nursing programs to compare their admission criteria against those of other programs. This could lead to time and cost efficiency as graduate nursing programs evaluate their criteria in comparison with the criteria used by other programs.

Second, this descriptive study will provide helpful information to prospective graduate nursing students about the type of criteria are used by various programs and the frequency of those criteria are used. This could aid prospective students as they

consider whether to apply to one program versus another. It could conversely have the effect of conserving a nursing programs' admission resources, because prospective applicants could engage in "self-selection", thereby reducing the potential number of students ill suited for the program. For long-term planning, potential applicants could also see areas in which to prepare themselves for application and the rigors of graduate education. This could in turn decrease faculty time and programs' need for supportive services.

Third, this study may serve as a starting point for further research and investigation in nursing literature regarding admission criteria for graduate degree in nursing. For example, future researchers may consider a correlative study comparing a program's admission criteria to its graduation or placement rates to determine admission criteria in predicting academic success. Researchers may also consider new tool development or expansion of tools already in existence.

In summary, the unique significance of this study will be in its descriptive presentation of all admission criteria for all accredited graduate nurse programs for Master degrees within the United States. This study will include demographic and descriptive data on subjects within these programs and focus on the importance of admission criteria in decision-making on the acceptance of applicants into graduate nurse programs.

Definition of Terms

The following terms are operationalized for the study:

 Admission criteria – those set of identified standards upon which accredited graduate nursing programs base their judgment or decision for accepting prospective students into the graduate nursing programs as identified in this study by item #10, selected by the respondents to this study's questionnaire (Appendix B).

- Graduate nursing programs those graduate nursing programs that are accredited as identified by either the National League for Nursing Accreditation Commission (NLNAC) and/or the Commission on Collegiate Nursing Education (CCNE) for at least 6 months prior to this study in their Program Directory lists of 2001.
- Graduate nursing students those individuals currently enrolled in accredited graduate nursing program either on a part or full time status.
- Masters Degree in Nursing all graduate nurse programs that award either generic or otherwise stated degrees in nursing as identified by the Directory of Accredited Nursing Programs – Masters 2001 for the NLNAC and the CCNE List of Accredited Programs for Master.

Assumptions and Limitations of the Study

The following are assumptions of this study:

- All accredited graduate nursing programs have established admission criteria
- All graduate students enrolled in accredited graduate nursing programs have been evaluated for admission to the program with the program's admission criteria
- Each accredited graduate nursing program has its own specific admission
 criteria for any individual application to the program
- All respondents will be honest in their answers to survey questions

• All persons completing the questionnaire have the information available to them to answer the questions

With regard to the limitations of this study, the researcher has identified the following:

- This study uses a questionnaire that has a potential self-selection bias, being that the response to the questionnaire is voluntary, and those who chose not to respond may differ from those who chose to respond
- This study is time-bound and cross-sectional by design choice
- The instrument (questionnaire) was not piloted for test/retest reliability
- The instrument may have omitted asking questions about other areas of importance (content validity)

In order to address issues of control within this study, the researcher did the following:

- Chose the entire population in the United States rather than a sample of schools
- From the literature review, identified types of programs existent in graduate nurse education to decrease questionnaire response time
- Addressed control of the subjects by having the questionnaire be filled out
 by either the dean or their designee
- Chose mostly close ended questions to save questionnaire completion time
- Limited the length of the questionnaire to 3 pages and kept a time limit for completion to under 30 minutes

- In the cover letter, allowed the respondent to call or email with questions to the researcher or program chair
- Included a stamped self-addressed envelope for return of the questionnaire to the researcher

Summary

The purpose of this study is to obtain data about the admission criteria to graduate nursing programs used by all accredited nursing schools in the United States. This chapter presents the lack of nursing literature about admission criteria for acceptance of students into graduate nursing programs. While three decades of nursing literature show some similarities in admission criteria, in particular graduate nursing programs, actual admission requirements have varied widely.

The main research question for this study is: what are the current admission criteria utilized by accredited nursing schools nationally for admission to their Masters in Nursing programs? Other questions in the development of this study address ranking of criteria, percentage of time spent by dean to their designee in the admission process, percentage of time spent by faculty and support staffing the admission process, and costs involved in graduate nurse education. The study is a quantitative descriptive research study with use of a questionnaire sent to dean or their designees of all accredited graduate nurse programs in the United States.

The significance of the study to nursing is that it may provide further research data and information to those applying for graduate education in nursing and for faculty, researchers and administration concerned with admission criteria. For potential graduate students, knowledge about the importance of admission criteria may assist

their preparation and application for graduate study. For faculty, researchers and administrators, knowledge of the importance of admission criteria may lead to further exploration or inquiry into the admission process for the purpose of time and cost efficiency.

In conclusion, knowledge about graduate nursing program admission criteria should help both those who seek admission to such programs and those responsible as faculty and administrators in such programs. Greater knowledge often makes change and growth possible. This researcher hopes this study will make this contribution.

Chapter II

Review of Literature

The research literature includes much general information about graduate nurse program admission. However, literature about specific admission criteria and how criteria are prioritized is extremely limited. This initial limitation was seen as a reason to gather more research. As a result, the search was extended into three decades of research literature. The expanded literature search revealed distinct themes within each decade of the 1970's, 1980's and 1990's.

In reviewing these three decades of literature, there was no conclusive agreement about appropriate graduate nurse admission criteria and their importance in rank. This finding illustrated the gaps and limitations in research literature and supports the need for this study. In this literature review, the sources will be addressed chronologically (1) research literature of the 1970's; (2) research literature of the 1980's; and, (3) research literature of the 1990's.

Of mention, the literature review consisted of searching the collection of healthcare databases available to all current graduate students, administrators and faculty at the researcher's university. This researcher limited her literature review to these sources, because these sources were deemed by the researcher to be the most readily accessible to potential applicants to graduate programs. Therefore, this search did not include non-research literature or reports such as those from the NLNAC, CCNE, nursing educational conferences or non-research journals. Again, this was done to focus on accessibility for potential graduate school applicants.

Research Literature of the 1970's

In the 1970's, the primary theme of nursing research literature on graduate nurse admission criteria was the use of undergraduate grade point average (UGGPA) and/or Graduate Record Examination (GRE) scores (Willingham, 1974; Stein & Green, 1970; Stein, 1978).

Apparent in all these studies is the controversy between those researchers supporting the use of UGGPA and/or GRE and those researchers dismissing their importance as admission criteria. The attention given to GRE usage was quite justified because, by the late 1960's, testing candidates for graduate school admission rose from 100,000 to 280,000 per year (Willingham, 1974).

The most prominent research study of this decade is the work of Rita Stein and Edith Green (1970). This work was consistently cited in the decades that followed. In their research, Stein and Green studied GRE scores for nursing students in graduate programs for the purpose of predicting graduate school success. Their population consisted of 35 Masters candidates at the Indiana School of Nursing in 1967-68. They found that both UGGPA and GRE were equally predictive of success in completing graduate nurse programs but that a sufficient UGGPA did not predict a sufficient performance on the GRE (1970).

Eight years later, Stein, working alone, repeated the research and this time, the results were in direct opposition to her earlier reliance on the GRE as a predictor of success (1978). The study was again conducted at Indiana University School of Nursing, using 54 full-time students in the masters program. In her findings, she strongly recommended using admission criteria other than the GRE, arguing that the

earlier results were biased by: (1) a difference on performance scores related to particular clinical specialty areas; and, (2) age of the population with a much larger sample size (54 full-time masters students versus 35 masters candidates) in the latter study (1978). Despite this recommendation, Stein's original work with Green appears to be the most accepted and mentioned study in current literature reviews of the 1990's (Rhodes, Bullough, and Fulton 1994; Hansen & Pozehl, 1995; Wilson, 1999, McEwan and Goldenberg, 1999).

In agreement with Stein and Green's research are other researchers in the 1970's that conclude that UGGPA and GRE scores are reasonable predictors of not only successful program completion, but also graduate grade point average (GGPA) as well (Willingham, 1974; Thomas, 1977). Of added interest, the 1990's executive director of the Educational Testing Service in Princeton, N.J., where the GRE originated and is distributed, recommended its use in conjunction with the UGGPA in doing further admission assessment (Willingham, 1974). Still, another researcher in this decade was in favor of the GRE as the "single best predictor" of success in graduate nurse education with regard to admission criteria (Thomas, 1977).

Supporting Stein's 1978 conclusion, other studies found no strong correlation between GRE scores and graduate school GPA (Ainslie et al, 1976; Sime, 1978). The GRE verbal score was seen as having a moderate correlation for success in certain areas of graduate nursing (community health, psychiatric) but not for basic GRE scores in their other individual components of testing or the graduate GPA (Ainslie et al, 1976). Other researchers found that UGGPA was a valid predictor of successful work in coursework focused solely on cognitive abilities. Elevated UGGPA successfully

predicted creativity, the ability to develop frameworks and systematic processes (Sime, 1978).

Research Literature of the 1980's

In entering the decade of the 1980's, determining admission criteria continued to present a challenge for nursing graduate faculty (Tripp & Duffey, 1981). There was an evolution of the 1970's theme on admission criteria regarding the UGGPA and GRE into two theme areas for 1980's research literature: (1) time and cost emerged as factors for faculty and administration in admission test selection, with other educational tests being investigated in lieu of the GRE; and, (2) discussion in the literature of other admission criteria was beginning to be explored more (Sime, Corcoran, & Libera, 1983; Sime, Corcoran, & Libera, 1983; Munro, 1985; Munro & Krauss, 1985).

A.M. Sime's research, published at the end of the 1970's, opened the door for looking at time and financial cost in admission testing for potential graduate nurse candidates (Sime, 1978). A more economical test, the Undergraduate Assessment Program Aptitude Test (UAPAT), was shown to provide the same predictive ability as grades and the GRE in predicting second and fifth semesters GGPA and faculty ratings of student characteristics (Sime, 1978; Tripp & Duffy, 1981).

Subsequent research evaluated tests such as the Remote Associates Test (a measure of creative abilities devised by Mednick and Mednick, 1967) and the Formula Analysis Test (a measure of flexible and analytical thinking devised by Worthy, 1967). These tests proved to be more time and cost efficient for certain researchers and used to make decisions regarding graduate school applicants (Sime, Corcoran and Libera, 1983; Sime, Corcoran, and Libera, 1983).

Other researchers explored the use of other admission criteria rather than educational testing for predictive ability with graduate nurse programs. These researchers explored undergraduate GPA's, but did their research with references, interviews and applicant essays (Munro, 1985; Munro & Krauss, 1985). In studies by Munro, and Munro and Krauss, the predictions of success showed varied results across clinical sub-specialties, such as Community Health, Midwifery, Psychiatric and Medical-Surgical nursing. Munro was also the first to directly address problems in using GRE and UGGPA to predict clinical performance (1985).

Nursing research done by Munro at Yale University included addressing the longstanding difficulty of predicting graduate clinical performance by devising a tool that rated graduate applicant essays on a scale of five components: (1) writing ability; (2) motivation; (3) research knowledge/experience; (4) strengths/weaknesses; and (5) additional experiences in healthcare (Munro, 1985). These essays were then judged by faculty on a four point scale. Still, the conclusion reached was that though the essay had the highest correlation with the Masters GPA, it was unrelated to prediction of clinical coursework (Munro, 1985).

A later retrospective study by Munro and Krauss showed no differences in postgraduate nursing groups when applying admission criteria to not only BSN nurses seeking graduate education but to nurses who entered the Yale University School of Nursing three year masters graduate program without a baccalaureate degree or as non-nursing college grades (Munro and Krauss, 1985). No significant differences were found among these groups of nursing and non-nursing students in their admission criteria that would predict graduate student success in terms of grades not only at the

end of the program, but also at the end of the first year of the specialty program.

Although the study's generalizability is questionable because it was limited to Yale

University only, the study is notable for its large sample size of 435 students and its

coverage of graduating classes from 1974 through 1981.

Research Literature of the 1990's

In the 1990's, the major theme of the research studies was the importance of using multiple criteria to make graduate nurse program admission decisions. Criteria under consideration included UGGPA; essays and autobiographical sketches; interviews; work history/clinical experiences; educational testing scores such as the GRE, Miller's Analogy Test, California Critical Thinking Skills Test; references, and RN licensures (Burns et Al., 1993; Rhodes, Bullough, & Fulton, 1994; Wilson, 1999).

Underlying this theme, financial and efficiency concerns, such as the amount of faculty time spent in the admission process, remained important elements (Burns et. Al., 1993; Hansen and Pozehl, 1995).

At this point in the literature, the studies disputing or supporting the GRE as the primary or secondary tool in selection of graduate nurse candidates completely cease and the GRE's usage is acknowledged as a potential "enhancement" to other admission criteria and process (Rhodes, Bullough & Fulton, 1994). However, undergraduate grade point average (UGGPA) was considered a more critical component when using multiple admission criteria (Burns et. Al., 1993; Fuller, 1995; Wilson, 1999).

Once again, as in Munro's 1985 studies, an attempt was made to streamline faculty time spent in the admission process in designing a measurement tool for program admission criteria. Hansen and Pozehl (1995) devised a tool that addressed

graduate nursing admission criteria by predicting performance of graduate students in nursing based on success theory as defined by Enright and Gitomer in their report for the GRE Board in April 1989 (Hansen & Pozehl, 1995; Enright & Gitomer, 1989).

In this theory of success, seven critical competencies were identified as mandatory for success in all types of academic graduate programs: communication, creativity, explanation, motivation, planning, professionalism, and synthesis (Enright and Gitomer, 1989). Hansen and Pozehl's instrument, the Graduate Performance Rating Scale (GPRS), was based on these seven critical competencies. Despite the researchers' conclusions in their article that demonstrated significant predictions, further in-depth review by this researcher of their article revealed that the GPRS tool was not a potentially sensitive tool for prediction.

Several reasons support this researcher's above conclusion: (1) their small sample size of 59 students; (2) the absence in the published study of presentation of a full tool that was utilized, and (3) the lack of explanation on how visual analog scales were converted into a numerical value for their final analysis. This researcher believes Hansen and Pozehl's study would have been more viable as a pilot study. Their research article and its tool needed revision rather than "refinement" as indicated in the article's conclusion (Hansen & Pozehl, 1995).

Of additional interest during this decade, nursing research shifted its focus into producing descriptive studies that began to explore other factors affecting academic success with regard to admission criteria. This shift in research coincided with the national shift of advanced practitioners into providing primary health care (Selleck & Gregory, 1994; McEwan & Goldenberg, 1999; Wilson, 1999). An example of such a

study is seen in McEwan and Goldenberg's research article, "Achievement Motivation, Anxiety and Academic Success in First Year Master of Nursing Students", that studies 41 first semester MSN students in three Canadian universities measuring the influence of anxiety and achievement motivation theory, as defined by J.A. Atkinson (1967), to correlate with first semester grade point average.

In summation, academic ability and anxiety had a greater potential for predicting which students would succeed, indicating the need to assess both cognitive and non-cognitive variables. Selleck and Gregory (1994) studies post-masters nurse practitioner programs, admission criteria and financial concerns. Using written and telephone surveys to 75 accredited nurse practitioner programs, they illustrated the large number of clinical nurse specialists who are returning to nurse practitioner programs and the lack of faculty, training sites, class space and financial assistance to support them (1994). The authors' main quantitative finding was that clinical nurse specialists are the largest group seeking post-masters nurse practitioner preparation (n = 56, 91.8%). To meet these needs, there are 81.3% of all post masters programs in this country that offer this type of preparation. Admission criteria becomes a blend of cognitive and non-cognitive data of "startling variability" among these nurse practitioner programs, with Selleck and Gregory's concern being the jeopardization in quality of health care provided by nurse practitioners' program preparation (p. 482, 1994).

In conclusion, these researchers' concern, stemming from their research results, raised the issues of: (1) how much program variability was acceptable to produce post graduate nurse practitioners with an ascribed set of competencies; and (2) how do

programs incorporate the notion of individual evaluation of students and their proficiencies.

Thad Wilson, in his article, "A Student Selection Method and Predictors of Success in a Graduate Nursing Program," continues to cite the lack of conclusive evidence regarding admission criteria for effectively selecting graduate nurse candidates (April, 1999). To provide for replication of his new selection process, he supplied a detailed description of his student selection process at the University of Missouri-Kansas City which utilizes the following:

- 1. UGGPA (specifically, BSN GPA);
- 2. California Critical thinking Skills Text;
- 3. references;
- 4. nursing experience/career development (including essay);
- 5. professional development; and
- 6. other modifying factors which influence funding (such as student placement, faculty match, full time versus part time and rural versus suburban).

Wilson states that there is no consistent method or criteria that he has found supporting one method or criteria over another to predict academic and professional success (1999). In summary, none of the above studies deviate from the conclusion that little to no conclusive evidence can be bound on predicting academic and professional success from a single consistent method or single admission criteria for graduate nurse education.

Research Literature from 2000 to Present

In the last eight months, two research articles have appeared in the health databases that pertain to admission criteria. Interestingly, both these articles mention the current climate of the nursing shortage and the concern of its present and future impact on admission criteria for undergraduate AD and BS RN and MSN programs.

Rodgers and Healy, in their article, "Integrating Master's Level Entry

Education Into an Established BS and MS Program," write descriptively of their 12year experience of faculty learning from integrating a second-degree entry level
master's program into existing nursing curricula (Rodgers & Healy, 2002). Thus far in
their program, all but one student passed the National Council Licensure Examination
for Registered Nurses (NCLEX-RN) on the first try and of those eligible for nurse
practitioner certification, 100 percent have passed and greater than 60 percent are
employed as nurse practitioners. The article describes barriers to their 12 years of
programming (finding faculty, clinical agencies, and financial exigencies) and factors
that contributed to their success (clear academic policies, first-year summer study, and
adherence to adult learning principles) (2002). Noteworthy in the article is
identification of high admission standards as the primary factor in the success of their
program. Their admission criteria are as follows:

- A baccalaureate degree from an accredited college or university
- Minimum undergraduate cumulative GPA of 3.0 on a 4.0 scale
- Score of 45 points or above on the Miller Analogy Test (MAT)) or combined scores of 1,000 (VQ)/1,500 (VQ & A) on the Graduate Record Examination (GRE) and have taken the GRE in the last 5 years

- Letters of personal reference
- Personal interview may be required

There are no conditional admissions to their program, and students must meet the minimal test criteria for admission on the MAT or GRE. They encourage flexibility with the admission process, yet remind one to be cautious. They have given consideration and exception to students with long histories of life experiences and high motivation, despite a lower GPA. However, in their experience, when a student had academic difficulties, record review usually reveals the student was admitted with a GPA of less than 3.0. Additionally, they state that the undergraduate major does not matter, and students with extremely diverse majors have been not only very successful, but graduate with a special combination of knowledge and skills.

The second most recent article is a descriptive exploratory study by Speziale that is entitled "RN-MSN Admission Practices and Curricula in the Mid-Atlantic Region" (Speziale, 2002). The purpose of this study was to describe admission and curricula requirements for RN-MSN programs in the mid-Atlantic region. This study's respondents involved 49 of 54 accredited graduate programs which were sent a survey to gather data on their programs regarding admission criteria used, undergraduate required courses, fast track options, course content, and program specific information. The response rate was 57 percent (n = 28). The first research question was of direct interest and pertinent to this researcher's study: "What are admission criteria for RN-MSN programs?" (Speziale, 2002).

In her findings, the most consistently required admission criteria were references, which were required by all respondents. Nine-six percent required a

graduation from an NLNAC- or CCNE- accredited program and minimum GPA of 2.5, with average GPA of 2.97 (Speziale, 2002). Eighty-five percent of the programs required work experience and 82 percent required a professional statement. Forty-two percent required completion of the GRE or MAT. Thirty percent used only the GRE,, and approximately 13 percent required only the MAT. The highest percentage of respondents did not have a required score for the GRE or MAT, and respondents indicated that scores were taken into consideration with all admission application data.

In addition, other admission requirements included: RN license, interview, undergraduate statistics course, curriculum vita, Graduate Management Admissions

Test for MSN/MBA, high school transcript, health records, physical assessment course and completion of certain number of specified credits (Speziale, 2002).

The researcher voices concern in her article about the finding of references as the most valuable part of the admission packet (Speziale, 2002). Speziale questions why references are a standard part of the package and whether faculty have not questioned their use or if faculty actually believe that references demonstrate the abilities of students applying to programs (2002). She concludes that there are patterns in admission requirements that may be or may not be of value across programs.

Summary

The literature on the topic of admission criteria in graduate nurse education is addressed over the past three decades, each decade with specific themes. In the 1970's, the universal theme in literature is the utilization of undergraduate grade point average (UGGPA) and/or Graduate Record Examination (GRE) scores as potential predictors of success in nursing graduate programs. In the 1980's, two themes emerged in the

research literature: (1) time and cost factors as critical concerns to admission test selection, and; (2) exploration of other admission criteria for its predictive ability. By the decade of the 1990's, it was apparent that importance was placed on utilizing multiple admission criteria to make decisions regarding graduate nurse program applicants and the financial feasibility of faculty participation in this selection process.

The most relevant of the studies that reflect what is known on the research topic throughout the three decades of research reviewed are as follow: (1) Stein and Stein with Green studies addressing utilization of UGGPA and GRE as admission criteria for graduate nurse programs (1970, 1978); (2) Munro and Munro with Krauss studies (1985, 1985A) concerning the exploration of other admission criteria for their predictive ability; and (3) Wilson's article (1999) which describes multiple admission criteria, his use of the admission selection process at University of Missouri at Kansas City and concludes that no final judgment in terms of single method or admission criteria can be found regarding admission criteria for graduate nursing education programs. Given the review of the literature on graduate nurse admission criteria, the information shows several accepted realities.

First, the GRE is not the only reliable test indicator of success in graduate nurse programs nor has it been shown to have a clear positive or negative relationship with UGGPA. Its best use may be as an adjunct to other criteria.

Secondly, admission criteria other than UGGPA and GRE, as discussed in Wilson's student selection process (1999), are necessary to evaluate candidates for graduate nurse education programs.

Lastly, the most current research in the 1990's on this topic states that there is indeed no conclusive evidence on the predictability of admission criteria for success in graduate nurse education programs (Wilson, 1999). Two other research articles found in an updated search for the new decade ahead remain concerned about use of admission criteria and producing qualified nurses in the current climate of shortage.

Despite the previous research about predicting academic success from graduate nursing program admission criteria, there is still no descriptive data collection of admission criteria that encompasses graduate nurse programs nationwide and how those admission criteria are being applied and prioritized. The need to fill this gap in literature is important so that further inquiries into predicting success in graduate nurse programs may begin with a comprehensive picture of descriptive data on admission criteria, specifying rank and priority, gathered from all accredited programs nationwide. No studies were found in the last three decades that completely prioritize or rank such data and it is the interest and intent of this researcher to provide such data within this study.

Chapter III

Methodology

The methodology utilized in the study is described in this chapter. The following information is organized into four basic areas: Design, Sample, Protection of the Rights of Subjects and Data Collection Plan.

Design

The design of this study is a descriptive quantitative research study. The purpose of this design was to describe, gather, and document the admission criteria utilized by accredited graduate nurse programs nationwide. In addition, data was collected regarding the rank importance of selected admission criteria for these programs.

The design decision for this study was the best choice because it gathered descriptive data to provide the answers to the research questions presented. The questionnaire was devised addressing the research questions. It was mailed to the deans or their designee of all accredited graduate nurse programs in the United States. The questionnaire also asked whether follow-up contact with the person responding to the instrument was permissible in case clarification about the responses was necessary. Data analysis was completed using the Statistical Package for the Social Sciences (SPSS), V-11®.

The questionnaire used for data collection was a three-page questionnaire designed by the researcher after extensive literature review and review of college catalogs. Additionally, there was review for content validity by an outside nursing research consultant and the director of the graduate nursing program in which this

researcher is currently enrolled. Each question on the questionnaire has relationship to the main research question and subsequent research questions. The questionnaire format was also chosen because it is reflective of the purpose of the study, capturing demographic data, and listing admission criteria.

These self-administered questionnaires were mailed to the deans of the 339 accredited graduate nurse programs nationwide, with instructions for the questions to be answered in writing by either the dean or his or her designee. Completing the questionnaire would indicate willingness to participate in this study.

Sample

For this descriptive quantitative research study, the target population was deans of graduate nurse programs nationwide. The accessible populations for this researcher were the deans of each accredited graduate nurse program in the United States. The criteria for eligibility is being dean of a NLNAC- and/or CCNE- accredited graduate nurse program in the United States. These deans and their programs were selected from the 2000/2001 Commission on Collegiate Nursing Education (CVCNE) List of Accredited Programs published respectively by the NLNAC and CCNE organizations. This researcher decided to gather research data for this study from all 339 NLNAC- and/or CCNE- accredited graduate nurse programs so as to provide a comprehensive base of descriptive statistics from all nationwide programs.

Protection of Rights of the Subjects

The names or organizations and programs are confidential, and all data is kept secured by the writer in a locked file for three years. The data was reported in

aggregate form. Though the questionnaires were coded, identities are kept confidential and known only to the researcher.

Self-addressed stamped envelopes were provided for return of the questionnaires, and follow-up reminder cards were sent seven weeks after the initial cover letters and questionnaires were sent. Data collection was closed ten weeks from the initial mailing of questionnaires. All participants were advised they could contact the researcher or her program director by email or phone if desired. They could also agree to permit contact from this researcher and to receive a copy of the results of this study.

This questionnaire has not been pre-tested, nor utilized in any other research study. The questionnaire was reviewed by this researcher's graduate program director, who estimated questionnaire completion time according to her experience and knowledge. The questionnaire was approved by the Institutional Review Board at Cardinal Stritch University in Milwaukee, Wisconsin, where the researcher is a graduate student in the Master's of Nursing program. A copy of the cover letter and survey is provided in Appendices A and B.

Data Collection Plan

The data collected from this study's questionnaire is descriptive and quantifiable, with the exception of a few open-ended questions that have the potential for qualitative data from respondents. Data collection in this study included the following areas:

- (1) demographics (types of programs);
- (2) duration of program;

- (3) completion times by graduates;
- (4) length of program existence;
- (5) areas of marketing;
- (6) number of degrees granted;
- (7) admission criteria (including identify of specific criteria for specific programs, criteria utilized, rank of importance of each criteria, single most important criteria, probationary admits), and;
- (8) financial and time constraints (including use of support services, time spent in the admission process, cost per credit hour with number of hours required for graduation, percentage of time devoted to admitting graduate students, use of any tool for admission evaluation).

The rationale for including the preceding items in the questionnaire is that these areas directly reflect areas of interest and inquiry from the literature review and research questions.

There was no need for separate consent forms in this study, because answering the questionnaire gave approval from the respondent to participate in the study as explained in the cover letter (Appendix A). As mentioned previously, the tool for this study has been approved by the Institutional Review Board at this researcher's university. All data received from the questionnaires is used for the purpose of this study only. Identification numbers are assigned to each program respondent and corresponding information is kept in a locked file with access to the researcher only for a period of three years.

Chapter IV

Data Analysis

In this study, 339 questionnaires were mailed to the deans of all accredited masters of nursing programs in the United States to obtain information on their admission criteria. Of these 339 questionnaires, 202 were returned, yielding a useable response rate of 59.6%. The respondents' questionnaires were from all geographic regions in the United States and there were no obvious discrepancies in response rates for the geographic regions. No geographic region had a 100% response rate to the questionnaire. The data from these returned questionnaires was analyzed using the data analysis program SPSS V-11®. Data was analyzed in the form of descriptive statistics as means, frequencies and percentages.

Findings

The purpose of this study was to obtain and present descriptive quantitative research data on the admission criteria used by accredited nursing schools for admission to graduate nurse programs. In this study, nine research questions were used to elicit data for this study.

The main research question of this study was, "What are the current admission criteria utilized by accredited nursing schools nationally for admission to their Masters in Nursing programs"? Of the 202 respondents, 181 had nurse practitioner programs (NP), 120 had clinical nurse specialist programs (CNS), 106 had nurse administrator programs (ADM), 191 had nurse educator programs (NED), 17 had nurse researcher programs (NR), and 44 had doctoral programs PhD).

Of the 202 respondents, one questionnaire was returned without any answers to the nursing programs question. The remaining respondents (schools) answered the question on their nursing graduate programs (masters) as follow:

- 27 schools offered one type of graduate nurse program
- 69 schools offered two types of graduate nurse programs
- 65 schools offered three types of graduate nurse programs
- 28 schools offered four types of graduate nurse programs
- 10 schools offered five types of graduate nurse programs
- 2 schools offered six types of graduate nurse programs

Table 1 presents the admission criteria for specific graduate nurse graduate programs and doctorate programs. The following current admission criteria were selected by the respondents: grade point average (GPA), Graduate Record Examination (GRE), essay, interview, work history, references and two categories ("Other 1" and "Other 2") for identification of other criteria. In the "Other 1" and "Other 2" categories, write-in responses included further testing (MAT), student fit with philosophy of the program, nursing GPA, professional and personal goals, rurality or site that the student was in, graduate statistics course, health assessment/physiology courses, and nursing license.

Table 1

Admission Criteria for Graduate Nurse Programs

Admission Criteria	NP	CNS	ADM	NED	NR	PhD
	n = 181	n = 120	n = 106	n = 191	n = 17	n = 44
GPA	98.3%	96.7%	98.1%	97.2%	88.2%	80.4%
GRE	65.5%	62.7%	61.8%	60.6%	70.6%	84.8%
Essay	68.6%	67.5%	63.5%	63.9%	58.8%	87.0%
Interview	58.5%	45.4%	47.1%	42.3%	35.3%	71.7%
Work History	72.8%	68.1%	71.2%	60.6%	70.6%	62.2%
References	93.1%	91.7%	90.5%	91.5%	76.5%	89.1%
Other 1	33.5%	31.0%	32.4%	33.3%	17.6%	36.4%
Other 2	14.6%	13.3%	10.5%	9.0%	5.9%	14.6%

To answer the question, "What are the admission criteria for each program?",

Table 1 also contains the data. The six main admission criteria to graduate nurse

programs that responded are as follows: (1) GPA; (2) GRE; (3) essay; (4) interview; (5)

work history; and (6) references. The other admission criteria that have been included
in various programs are above.

The third research question of this study was, "What is the ranking of importance of the admission criteria utilized?" Respondents were asked to rank their admission criteria with the highest, most important criteria ranked as "1". Table 2 presents the ranking of admission criteria used in each specific graduate nurse program, as well as the doctorate programs. In the responding graduate nurse masters programs,

the top three in rank of importance of admission criteria are GPA, references and work history. The only exception to this is the nurse educator program (NED) which identifies an essay as the third most important admission criteria versus work history. In the nurse researcher program (NR), there is a tie for second most important criteria between GRE and references. In the doctoral programs, the top three admission criteria are GRE, GPA, and essay.

Table 2 below presents data about the third research question in mean rank of each specific graduate nurse program and doctoral programs that responded.

Table 2

Mean Rank of Admission Criteria by Types of Programs

Admission Criteria	NP	CNS	ADM	NED	NR	PhD
GPA	1.58	1.67	1.91	1.78	1.42	3.09
GRE	5.32	5.36	5.14	5.48	4.00	2.91
Essay	4.93	5.13	4.99	4.54	4.17	3.18
Interview	5.18	6.00	5.96	6.21	5.58	4.36
Work History	4.73	4.51	4.73	4.91	4.25	6.03
References	4.37	4.17	4.44	4.33	4.00	4.82
Other 1	7.52	7.51	7.40	7.54	7.25	6.81
Other 2	8.48	8.38	8.64	8.79	8.33	8.17

The fourth research question for this study was, "What is the single most important admission criteria to graduate nurse programs?" This question was presented as an open-ended write-in question on the questionnaire. Of the 202 questionnaires

returned, 190 institutions identified "GPA" or "UGGPA" as the most important criteria. Ten respondents gave answers of interview, testing, goals, or references as the most important criteria, while two institutions failed to respond to this particular question on the questionnaire. GPA was ranked the highest for every program except the PhD programs of the responding institutions.

The fifth question for this study was, "What percentage of students admitted are admitted on a 'probationary' or 'conditional' status?" Table 3 below presents the data in frequency, percent and valid percent data.

Table 3

Probationary/Conditional Admitted Students on Annual Basis

% of Students Admitted on Probation	Frequency	Percent	Valid Percent
0%	30	14.9	15.8
1-2%	63	31.2	33.2
3-5%	49	24.3	25.8
6-10%	27	13.4	14.2
11-20%	16	7.9	8.4
> 20%	5	2.5	2.6
Total	190	94.1	100.0
Missing System	12	5.9	
Total	202	100.0	

Of the total 202 respondents, 190 responded to this question (12 missing). The greatest frequency of 63 or 31.2% responded that between 1-2% of their students are admitted on probationary or conditional status. Five respondents or 2.5% stated that greater than 20% of their admits were probationary or conditional. In addition, thirty respondents also indicated that none of their students were admitted on such status.

The sixth question for this study was, "Do these probationary students admitted receive any supportive services to complete your graduate nurse program?" Table 4 below presents the data in frequency, percent and valid percent to answer this question.

Table 4

Probationary/Conditional Students Receiving Supportive Services

Students Receiving	Frequency	Percent	Valid Percent
Supportive Services			
Yes	64	31.7	33.9
No	100	49.5	52.9
N/A	25	12.4	13.2
Total	189	93.6	100.0
Missing System	13	6.4	
Total	202	100.0	

Of the 202 respondents, 189 answered this question (13 missing). Of the 189 respondents, 100 or 49.5%, answered that they do not utilize supportive services for probationary/conditional students that are admitted. Of the 189 respondents, 64

respondents, or 37.5 of the respondents, stated that these types of students do receive supportive services in order to complete the program.

The seventh question for this study was, "Do you currently use a tool for decision making in selecting graduate students for admission to programs?" Table 5 below presents the data necessary to answer this question.

Table 5

Currently Using a Tool for the Admission Process

Schools Using a Tool	Frequency	Percent	Valid Percent
Yes	61	30.2	32.4
No	127	62.9	67.6
Total	188	93.1	100.0
Missing System	14	6.9	
Total	202	100.0	

Of the 202 respondents, 188 respondents answered this question (14 responses were missing). Sixty-one, or 30.2% of the respondents, indicated that they do currently use a tool for the admission process to their graduate nurse programs while 127 respondents, or 62.9%, indicated that they do not use a tool.

The eighth research question for this study was, "What percentage of your time (dean or designee) is devoted to admitting graduate students to your program?" Table 6 presents the data obtained from the responses to this question.

Table 6

Percentage of Time spent Admitting Graduate Students to Program

% of Time Spent Admitting Graduate Students	Frequency	Percent	Valid Percent
.00	17	8.4	9.4
1-5	50	24.7	27.9
10-15	52	25.8	28.9
20-25	33	16.3	18.3
30-35	13	6.5	7.2
40-50	7	3.5	3.9
60-66	4	2.0	2.3
70-75	2	1.0	1.2
90	2	1.0	1.1
Total	180	89.1	100.0
Missing System	22	10.9	
Total	202	100.0	

As shown in the above Table 6, respondents indicated that they spent 0-90% of their work time admitting graduate students to their programs. There were a total of 180 out of 202 respondents that answered this question. Two respondents indicated that

they spent 90% of their time in admitting students. Seventeen respondents stated that they spent none of their time in admitting students to their programs. Of the total 180 responses to this question, 135 responses indicated that they spent 1-25% of their time in the admission process. Twenty-two of the total questionnaire respondents did not respond to this question.

The ninth research question for this study was, "Are there other personnel involved in admitting graduate students to your programs?" Table 7 presents the responses to this question.

Table 7

Other Personnel Involved in Admission of Graduate Students

Other Personnel Involved	Frequency	Percent	Valid Percent
Yes	154	76.2	85.6
No	11	11 5.4	
N/A	15	7.4	8.3
Total	180	89.1	100.0
Missing System	22	10.9	
Total	202	100.0	

Out of the 202 total respondents, 180 respondents answered this question (22 were missing). Of these 180 respondents, 154 respondents, or 76.2%, indicated that they did indeed have other personnel involved in admitting graduate students to their programs. Eleven respondents, or 5.4%, reported that they did not involve any other personnel in admitting graduate students to their program. Of the 180 respondents to this question, 15 respondents, or 7.4% of the respondents, stated the question was not applicable.

Though there were nine identified research questions for this study, there was additional data collected from questions 5, 6, 7 and 8 on the questionnaire that will now be addressed in narrative form. In question 5, between 71.6 to 78.1% of the respondents expected graduate students to complete the NP, NR or NSA programs in less or equal to 2.5 years. In question 6, discrepancies were evident due to respondents answering contact versus credit hours and responses were not reliable based on my knowledge of program brochures and college catalogs. Given this, 50% of respondents did require 54 hours or less for program completion. In question 7, 80-82.4% of all graduate nurse programs as identified in the questionnaire are marketed in state while 16.2-18.1% are marketed internationally. In question 8, respondents indicated that they granted approximately 5-6 CNS, NR, ADM or PhD degrees per year while NED averaged about 10 per year.

Chapter 5

Summary, Conclusions, and Recommendations

Summary

This descriptive quantitative study was undertaken to gather data from all accredited graduate nurse programs nationwide about their admission criteria. There was a 59.6% response rate to the questionnaire. The purpose of this study was to gather data on what are the current admission criteria being utilized for admission in to their graduate nurse programs.

A brief summary of the respondents' answers are presented corresponding in number to each research question:

- 1.) Of the programs responding, the current admission criteria being utilized for admission to graduate nurse programs are GPA, GRE, essay, interview, work history and references. Other criteria included educational testing other than the GRE, student fit with philosophy of the program, Nursing GPA, professional and personal goals, rurality or site that the student was in, graduate statistics course, health assessment/physiology courses, and nursing licensure.
- 2.) The six main admission criteria to graduate nurse programs in this sample are the following: GPA, GRE, essay, interview, work history, and references.
- 3.) In terms of ranking of importance of admission criteria, GPA, references, and work history rank as the tope three in the responding graduate nurse masters programs. The exception is the nurse educator programs, which ranked essay as the third most important admission criteria instead of work history. The

- responding nurse researcher programs used work history and GRE and their second criteria with equal frequency.
- 4.) The single most important admission criteria of graduate nurse programs in the sample is GPA or UGGPA.
- 5.) One to two percent of students in the graduate nurse programs that responded are admitted on a conditional or probationary status.
- 6.) Of students admitted on a conditional or probationary status, 52.9% do not receive any supportive services and 33.9% do receive such.
- 7.) For responding graduate nurse programs, 67.6% did not use a tool for admission decision-making, while 32.4% acknowledged they did use a tool.
- 8.) The deans or their designees in the sample graduate nurse programs most commonly spend 0-25% of their time in the admission process.
- 9.) The majority of graduate nurse programs (85.6%) that responded have personnel other than the dean involved in admitting graduate students to their programs.

 Conclusions

The researcher set out to gather data about the admission criteria to graduate nurse programs nationwide. Two hundred two of 339 programs responded to the questionnaire mailed to them. Based on the literature review, some of the answers to the research questions presented in this study were predictable, some were surprising, and still others provoked further interest to this researcher for future nursing practice, theory, and research.

This researcher places the respondents' answers to questions on admission criteria and their rank importance in this category of predictability. For questions #1

and #2 of this study, the literature review showed that grades and GRE scores could be important admission criteria and of significance in admitting graduate nurses to programs.

Further, it was predictable that conditional/probationary students were admitted at a lower percentage because admitting these students allows programs greater choice when the number of applicants exceeds the number of available student positions (AACN, 2001). The responses about deans or their designees having supportive personnel involved in admitting graduate students were also predictable. The complexity of the admission processes as described in various college catalogs would dictate more than one person involved.

The most surprising respondent answers to this researcher were about the single most important criteria to graduate nurse programs. The overwhelming answer by respondents as GPA/UGGPA, despite the literature review showing the circular argument of grades predicting grades and the most recent literature discussing the acceptance of students with less than acceptable GPA but other excellent criteria (Rodgers & Healy, 2002). Of the 201 respondents to this question, 190 gave the answer of GPA/UGGPA as the most important admission criteria while only 11 identified another criteria.

The other surprising area was the respondents' answers to the use of an admission decision-making tool. Despite the enthusiasm seen in the literature reviewed for such tools, only 34.2% acknowledged using a tool for this process, as opposed to the 67.6% who denied using a tool. A few respondents provided their admission tool for

the researcher, and interestingly, only four respondents did not request results of this survey.

Three research questions provoked further interest to this researcher for nursing practice, theory, and research from the data collected. It was interesting to this researcher that graduate nurse programs in the nurse practitioner (NP), clinical nurse specialist (CNS), and nurse administrator (ADM) area shared the same ranking of criteria while two other programs, that of nurse educator (NED) and nurse researcher (NR) were ranked differently. The implication is that additional strengths could be viewed as necessary by these programs. In terms of practice and theory, the researcher questions why NP, CNS, and ADM programs share these rankings and what their importance is to program completion.

Another question of interest is the offering of supportive services to conditional/probationary students. Since the majority of these types of students do not receive services, a question arises about whether conditional/probationary students are completing programs at the same rates as those students who are offered supportive services.

Additionally, the research question on the amount of time spent by deans or their designees on the graduate admission process is interesting to this researcher. Because most deans or their designees are mostly spending 0-25% of their time in the admission process, what other personnel are involved in the admission process, what is the process of decision-making for admission, and how does the final decision occur with which personnel involved?

In conclusion, this study shows data applicable to the three major areas of nursing practice, nursing theory and nursing research:

- If a student is interested in pursuing entry to a graduate nurse program, they must not underestimate the importance of their GPA or UGGPA.
- Nurse educator and nurse researcher programs rank admission criteria
 differently than other programs, and students and educators alike need to
 focus on the different strengths needed for advanced practice in these areas.
- Nursing researchers appear to have concerns about admission criteria and their relationship to successful completion of their advance practice programs.

Recommendations

This researcher recommends additional descriptive studies and studies that potentially correlate successful completion of programs with select admission criteria. In retrospect, the questionnaire should be pilot tested and refined for additional validity. Though data was collected and not reported upon because of the specific research questions addressed, there remain areas where additional questions could have added clarification or significance to the results obtained. Such an example would be the responses regarding supportive services: "What are these services offered?" or "Are such supportive services offered through your program?" Also, the clarification of credit versus contact hours for degree completion could have designated ranges for tuition amounts which would allow the respondent to choose rather than to state answers.

Of the nine research questions discussed in this study, at least half have resultant data that would provide strong threads for development of further nursing research. Most notable to this researcher would be in two very applicable areas: (1) the successful completion of programs by students and relationship to different variables of admission criteria, and (2) the success or failure of conditional/probationary students in programs, with or without supportive services. Additionally, given the completely different ranking in data of doctoral program admission criteria to masters program admission criteria, the area of doctoral study and its admission process holds great interest and promise for the future.

For the nurse educator, the implication in this study is to continue to view grades as our current and best reflection of student learning and potential. It is therefore important that the nurse educator consider the impact that her grades will have upon future students seeking advanced degrees and to ensure that her/his grading policies are an accurate reflection of coursework.

If it is only one statement that this study provides as a recommendation to future applicants and educators, it would be this alone: do not underestimate grades as they matter significantly in gaining admission to graduate nurse programs.

References

- Ainslie, B., Andersen, L., Colby, B. Hoffman, M. Meserve, K., O'Connor, C., et al. (1976). Predictive Value of Selected Admission Criteria for Graduate Nursing Education, *Nursing Research*, 25(4), 296-299.
- American Association of Colleges of Nursing, & National Organization of Nurse

 Practitioner Faculties. (2001). Enrollment and Graduations in Baccalaureate

 and Graduate Programs in Nursing. Washington, D.C., USA: American

 Association of Colleges of Nursing.
- Burns, P., Nishikawa, H., Weatherby, F., Forni, P., Moran, M., Allen, M., et al. (1993).

 Master's Degree Nursing Education: State of the Art., *Journal Of Professional Nursing*, 9(5), 267-277.
- Burns, N., & Grove, S. (1993). The Practice of Nursing Research: Conduct, Critique and Utilization. Philadelphia: W.B. Saunders Company. (Publication Manual, 2001).
- Enright, M.K., & Gitomer, D./Graduate Record Examinations Board. (1989). Toward a

 Description of Successful Graduate Students (GRE Board Research Report No.

 85-17R, pp. 7-37). Princeton, N.J., UJSA: Educational Testing Service

 Princeton, N.J.
- Foster, J. (1998). *Data Analysis: Using SPSS for Windows*. Thousand Oaks, California: Sage Publications.
- Fuller, K. (1995). Identification of Pre-Admission Criteria Predictive of Success in Graduate Nurse Anesthesiology Programs. *Dissertation Abstracts*, 1-94, (UMI No. 9532128).

- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). Educational Research: An Introduction.

 White Plains, New York: Longman Publishers.
- George, D., & Mallery, P. (1999). SPSS for Windows Step by Step. Needham Heights,

 Massachusetts: Allyn and Bacon: A Viacom Company.
- Hansen, M. J., & Pozehl, Bunny J. (1995). The Effectiveness of Admission Criteria in Predicting Achievement in a Master's Degree Program in Nursing. *Journal Of Nursing Education*, 34(9), 433-437.
- Kerr, A. A., Hall, H. K., & Kozub, S. A. (2002). *Doing Statistics with SPSS*. Thousand Oaks, California: Sage Publications.
- McEwan, L., & Goldenberg, D. (1999). Achievement Motivation, Anxiety and

 Academic Success in First Year Master of Nursing Students. *Nursing Education*Today, 19(5), 419-430.
- Mednick, S., & Mednick, M. (Eds.). (1967). Examiner's Manual Remote Associates

 Test: College and Adult Forms 1 and 2. Boston: Houghton Mifflin.
- Morgan, G. A., & Griego, O. V. (1998). Easy Use and Interpretation of SPSS for Windows. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc. Publishers.
- Munro, B. H. (2001). Statistical Methods for Health Care Research. Philadelphia: Lippincott, Williams and Wilkins Publishers.
- Munro, B. H. (1985). Predicting Success in Graduate Clinical Specialty Programs.

 Nursing Research, 34(1), 54-57.
- Munro, B. H., & Krauss, J. B. (1985). The Success of Non BSNs in Graduate Nursing Programs. *Journal Of Nursing Education*, 24(5), 192-196.

- National Center for Health Workforce Analysis. (July 2002). *Projected Supply*,

 Demand, and Shortages of Registered Nurses: 2000-2020 (National Supply and Demand Projections). Washington, D.C., USA: U.S. Department of Health and Human Services.
- Polit, D. F., Beck, C. T., & Hungler, B. P. (2001). Essentials of Nursing Research:

 Methods, Appraisal and Utilization. Philadelphia: Lippincott, Williams and
 Wilkins Publishers.
- Polit, D. F., & Hungler, P. P. (1999). Nursing Research: Principles and Methods.

 Philadelphia: Lippincott Publishers.
- Publication Manual of the American Psychological Association (Fifth Edition ed.).

 (2001). Washington, D.C.: American Psychological Association.
- Rhodes, M., Bullough, B., & Fulton, J. (1994). The Graduate Record Examination as an Admission Requirements for the Graduate Nursing Program. *Journal Of Professional Nursing*, 10(5), 289-296.
- Rodgers, M., & Healy, P. (2002). Integrating Master's-Level Entry Education Into an Established BS and MS Program. *Journal Of Professional Nursing*, 18(4), 190-195.
- Selleck, C. S., & Gregory, S. J. (1994). What's Happening: Survey and Analysis of Nurse Practitioner Educational Programs. *Journal Of The American Academy* Of Nurse Practitioners, 6(10), 479-483.
- Sime, M. (1978). Prediction of Success in a Masters Degree Program of Nursing.

 *Psychological Reports, 42, 779-783.

- Sime, A., Corcoran, S., & Libera, M. (1983). Predicting Success in Graduate Education. *Journal Of Nursing Education*, 22(1), 7-11.
- Sime, A., Corcoran, S., & Libera, M. (1983). BSN vs. Non-BSN Students and Success in Graduate Study. *Journal Of Nursing Education*, 22(5), 190-194.
- Speziale, H. (2002). RN-MSN Admission Practices and Curricula in the Mid-Atlantic Region. *Nursing Education Perspectives*, 23(6), 294-299.
- Stein, R. (1978). The Graduate Record Examination: Does It Predict Performance in Nursing Programs. *Nurse Educator*, 3, 16-19.
- Stein, R., & Green, E. (1970). The Graduate Record Examination as a Predictive Potential in the Nursing Major. *Nursing Research*, 19(1), 42-47.
- Thomas, G. (1977). Differential Utility of Predictors in Graduate Nurse Education.

 Nursing Research, 26(2), 100-102.
- Tripp, A., & Duffey, M. (1981). Discriminant Analysis to Predict Graduation-Nongraduation in a Master's Degree Program in Nursing. *Research In Nursing*And Health, 4, 345-353.
- Willingham, W. (1974). Predicting Success in Graduate Education. *Science*, 83 (Jan), 273-278.
- Wilson, Thad. (1999). A Student Selection Method and Predictors of Success in a Graduate Nursing Program. *Journal Of Nursing Education*, 38(4), 183-187.
- Worthy, M. (1967). The Formula Analysis Test as a Predictor in Graduate School.

 *Psychological Reports, 20, 36-40.

Appendix A

February 15, 2002

Dear Dean,

My name is April Pellmann and I am a graduate student pursuing my master's degree in nursing education at Cardinal Stritch University in Milwaukee, Wisconsin. As part of my thesis, my chosen focus is on admission criteria to graduate nurse programs nationwide. This letter and survey are being sent to all 339 NLN and/or CCNE accredited masters of nursing program deans throughout the country.

My study has great significance for the discipline of nursing and for future nursing practice for several reasons. First, even though literature indicates that applications to graduate nurse programs continues to rapidly grow, I have been unable to find any comprehensive descriptive data collection on consensus of current admission criteria for such programs in this country. Secondly, greater knowledge of this area may serve to better prepare and promote graduate nurse program candidates as well as yield greater cost and time effectiveness for faculty involved in the admission process. Lastly, this study is undertaken with the belief and hope that it will provide a fundamental basis for further research into predicting the successful selection of candidates to graduate nurse programs. I will be providing results of this study to those deans or their designee who complete the survey and indicate their desire in the attached survey to have a copy mailed to them.

Attached to this cover letter is a 3 page survey that takes approximately 25 minutes to complete. Your completion of this survey indicates your willingness to participate in this study. All organizations and programs will remain anonymous and all data is held confidential kept in a locked cabinet by the researcher. The data will be reported in aggregate form only. Surveys will be coded and the identities held confidential and known only to the researcher. A self-addressed stamped envelope is included for your return of the survey to me. Please also be advised that I will be sending you a follow-up completion reminder card in the future after the initial letter and survey have been mailed to you. This study has received IRB approval from Cardinal Stritch University.

I would welcome and appreciate any questions or concerns you may have regarding the survey. Please feel free to contact me at the following address, phone or email:

Ms. April Pellmann 7033 N. Lombardy Rd Fox Point, WI 53217 414.228.7187 aprilpel@execpc.com If you have any immediate concerns or complaints about the study, please feel free to contact the following:

Dr. Ruth Waite
MSN Program Chair
Cardinal Stritch University
6801 N. Yates Rd.
Milwaukee, WI 53217
414.410.4388

If you have any additional concerns or complaints about this study, please feel free to contact the following:

Sr. Gabrielle Kowalski, PhD Chair, Institutional Review Board Cardinal Stritch University 6801 N. Yates Rd. Milwaukee, WI 53217 414.410.4109

I thank you greatly in advance for your time and cooperation.

Sincerely, april fellmann

April Pellmann

Appendix B

Criteria for Admission to Graduate Nurse Programs Survey

 What type of progra Nurse practition 									tration	1
O Nurse Resear				•	- 1401	omy c	, c. 1, c.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•
2. In what State is you	ır instit	ution locat	ed?_							
3. How long have each	of your	programs	beer	n in existen	ce?					
Nurse Practitioner				5-10 years		•		>20 year		0 N/A
Clinical Nurse Speci								>20 year		0 N/A
Nursing Service Ad	min.	O <5 years	0	5-10 years	0 11-2	20 ye	ars O	>20 year	'S	ONIA
Nurse Educator	(0 <5 years	0 !	5-10 years	0 11-2	20 ye	ars O	>20 year	's	0 N/A
Nurse Researcher	,	0 <5 years	0	5-10 years	0 11-	20 ye	ars O	>20 year	`s	0 N/A
4.What degrees does	vour ins	stitution ar	ant?	(Fill in all	that apr	nlv)				
•	BSN	MSN		PhD, Ed		•				
0	0	0		0	•,					
5. The expected progra	am com	pletion tim	e fo	r each proq	ram is:					
Nurse Practitioner	С	· <2 years	02	.5 years	03 ye	ars	0 5-10) years	0 N/A	1
Clinical Nurse Spec	ialist C	<2 years	02	.5 years	03 ye	ars	05-10) years	0 N/A	1
Nursing Service Ac	lmin. C	<2 years	02		03 ye) years	0 N/A	1
Nurse Educator		<2 years		•	03 ye) years	0 N/A	
Nurse Researcher	C	(2 years	0 2	.5 years	03 ye	ars	0 5-10) years	0 N/A	4
6 Now many andit ha		naguinad i	600.0	naduation?	14/ha+ i	. +h.a	coct/c	nadi+ ha	un	
6. How many credit ho in each program?	ours are	required i	_	Hours requ					ui	
Nurse Practitioner	•		77	rioui s i equ	ii eu	Ψ/ C	i euii i	loui		
Clinical Nurse Spec										
Nursing Service Ac										
Nurse Educator	2111111.									
Nurse Researcher										
radi se kesedi cilei						,				
7. Where are your pro	grams	marketed?	+							
Nurse Practitioner	•	0 in st	ate	OinUSA	O Inte	rnati	onally	ON/A		
Clinical Nurse Spe		O in st		O in USA	O Inte			ON/A		
Nursing Service A	dmin.	O in st	ate	O in USA	0 Inte	rnati	ionally	0 N/A		
Nurse Educator		0 in st	ate	OinUSA	0 Inte	rnati	onally	0 N/A		
Nurse Researcher		0 in st	ate	O in USA	0 Inte	rnati	onally	0 N/A		

(· · · · · · · · · · · · · · · · · · ·	se Rese	Nurse Sp	ch progran pecialist ((NR) PhD	CNS) N	lursing all th	Service Adm at apply)	in.(AD/
116.6	NP	CNS	ADM	NE	NR	PhD	
UG Grade point	0	0	0	0	0	0	
GRE	0	0	0	0	0	0	
Essay/Writing sample	0	0	0	0	0	0	
Interview	0	0	. 0	0	0	0	
Work History	0	0	0	0	0	0	
References	0	0	0	0	0	0	
Other 1	. 0	0	0	0	0	0	
Other 2 O. Please rank the import	O ance of	O each ad	O mission cr	O iteria f	O for Nu	O rse Practition	er (NP)
	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP)) Nursi
0. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R	ance of Nursing	each ad Service	mission cr Admin.(Al	iteria 1 DM) N	for Nu Jurse E	rse Practition Educator (NE)	ier (NP <u>)</u>) Nursi
0. Please rank the import Nurse Specialist (CNS) N	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP)) Nursi
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point GRE	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nursi
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point GRE Essay/Writing sample	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nursi
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point GRE Essay/Writing sample Enterview	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nurs
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point GRE Essay/Writing sample Interview Work History	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nurs
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point SRE Essay/Writing sample Enterview Work History References	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nurs
O. Please rank the import Nurse Specialist (CNS) N Researcher (NR) PhD (R UG Grade point GRE Essay/Writing sample Interview Work History	ance of Nursing anking	each ad Service 1 as mos	mission cr Admin.(Al t importar	iteria 1 DM) N nt to 8	for Nu Jurse E least i	rse Practition Educator (NE) nportant)	ier (NP) Nurs

12. Are there alternate means of admission such as "probationary" or "conditional" at your
institution? Oyes ONo If yes: Please describe how this is decided upon and evaluated and if admission criteria is
a factor.
What percentage of students admitted to your programs are admitted on such status on an
annual basis? 00% 01-2% 03-5% 06-10% 011-20% 0>20%
Do those type of applicants admitted receive any supportive services to complete your graduate nurse program. O Yes O No O N/A Please describe:
Please describe the process for these students to no longer being on "probationary" or "conditional" status.
13. What percentage of your responsibility per semester is devoted to admitting graduate students to your program?
If other personnel are involved in the admitting process, what percentage of their time is devoted to admitting graduate students to your program? OYes ONO ON/A What is their position.
14. Do you currently use a tool for decision making in selecting graduate students for admission to your program. O Yes O No
If yes, would you be willing to provide a copy of the tool? O Yes O No O N/A Is the tool helpful to you? O Yes O No O N/A Please comment as to your answer.
The following information is optional
Name of person completing this form:
Title and position
Date
Comments
Would you like to receive a copy of the results of this survey? Oyes ONo
If I have questions, may I call you or contact you by email? Oyes ONo
If yes: Phone number where you can be reached
Email address where you can be reached

Thank you very kindly for your time and cooperation.