1990

Characteristics of students who fail the NCLEX-RN

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Characteristics of students who fail the NCLEX-RN

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San Jose State University, 1990

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**CHARACTERISTICS OF STUDENTS WHO FAIL
THE NCLEX-RN**

A Thesis

Presented to

**The Faculty of the Department of Nursing
San Jose State University**

**In Partial Fulfillment
of the Requirements for the Degree
Master of Science**

by

Susie E. Brown

May, 1990

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ABSTRACT
CHARACTERISTICS OF STUDENTS WHO FAIL
THE NCLEX-RN

by Susie E. Brown

This research study used a descriptive design to discover the common characteristics of students who fail the NCLEX-RN. Schwirian's (1981) Model of Nursing Performance was used as the conceptual framework. The data were collected from 94 student records at a nursing education program in northern California. The study was conducted in the spring semester of 1989.

It was determined that students who failed the NCLEX-RN do show common characteristics. These characteristics include: (a) lower cumulative GPA, (b) lower prenursing GPA, (c) lower nursing theory GPA, (d) younger in age when the test was taken, (e) number of times test was attempted and failed, (f) students enrolled in the special progression program (students who received less than a C grade in one or more nursing classes). The researcher recommends that further studies be conducted with a larger sample population in order to increase generalizability of results.

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Chapter 1

INTRODUCTION

The number of students failing the National Council Licensure Examination for Registered Nurses (NCLEX-RN) is contributing to the current nursing shortage. Nursing education programs are graduating the students, but many of these students are later failing the NCLEX-RN. As a consequence, they are unable to work as registered nurses, which further exacerbates the nursing shortage. The problem of failure of the NCLEX-RN has been identified nationwide (McKinney, Small, O'Dell, & Coonrad, 1988). Of the 55,000 nurses who took the state licensure examination in July, 1988, 16% failed (National Council of State Boards of Nursing, 1988). Licensure makes it possible for a nurse to practice his or her profession legally. Failure of this test contributes to the serious nationwide nursing shortage.

The problem is severe enough to merit the concern of the nursing profession. California serves as a good example. In February of 1988, 1,163 people took the NCLEX-RN there. The failure rate of these people was 18.1%. In July of the same year, 3,609 people took the examination; of this group, 16.9% failed. Looking back to July, 1987, reveals a failure rate of 12.6%. A year earlier, in July, 1986, the failure rate was even lower at 10.0% (National Council of State Boards of Nursing, 1988). Since 1986, then, the number of students failing the NCLEX-RN has risen alarmingly.

Problem and Research Question

Failure of the NCLEX-RN affects both students and faculty, for it represents a tremendous waste of human and monetary resources (Weinsten, Brown, & Wahlstrom, 1980). Being able to identify students who are at risk for failure of

the NCLEX-RN would enable the faculty to intervene earlier with these students and perhaps prevent them from failing the NCLEX-RN.

The NCLEX-RN replaced the State Board Test Pool Examination (SBTPE) in 1982. The major difference between these two tests is that the SBTPE is based on a medical model, and the NCLEX-RN is organized in a nursing process framework (Woodham & Taube, 1986). The NCLEX-RN is given twice a year throughout the United States.

One suggested reason for the increasing failure rate is the declining enrollment in baccalaureate nursing education programs. Among possible reasons for this enrollment decline are an overall decrease in the numbers of college-age individuals, an increase in career options for women, an increase in educational costs, and a decrease in the availability of financial aid (Allen, Higgs, & Holloway, 1988). Another reason for the higher failure rate could be that better qualified students are attracted to higher salaried professions (McKinney et al., 1988).

Additional research is needed to determine the characteristics of people who fail the NCLEX-RN. With this information, students with potential for failure can be identified early on in their nursing programs. According to Yang, Glick, and McClelland (1987), once identified, students at risk can be assisted in correcting deficiencies. Correcting students' deficiencies will assist them to pass the NCLEX-RN. At the same time, nursing education programs will become more accountable to their students by assuring them that the necessary measures will be taken to assist them in passing their exams. This study focused on identifying the common characteristics of students who fail the NCLEX-RN. The research question was: What are the characteristics of students who had failed the NCLEX-RN in one baccalaureate nursing program?

Purpose and Need

The purpose of this study, then, was to identify the characteristics of students from one baccalaureate nursing program who failed the NCLEX-RN. Nursing education programs are concerned with students who matriculate through their respective nursing programs and later fail the NCLEX-RN. The nursing profession is equally concerned with providing society with an adequate number of safe nursing professionals to meet its urgent and ever increasing health care demands.

Definition of Terms

1. Students. Baccalaureate nursing students enrolled in a university in northern California during the academic years 1982 to 1988.
2. NCLEX-RN. The National Council Licensure Examination for Registered Nurses. This examination must be passed in order to practice as a registered nurse.
3. SAT. Scholastic Aptitude Test. A standardized test taken by students as a prerequisite for admission to the university as a freshman.
4. GPA. Grade point average.
5. Cumulative GPA. Numerical grade average of grades in all courses completed by the nursing student during his or her course of study.
6. Prenursing GPA. Numerical grade average of all courses taken prior to formal admittance into the nursing program. The prenursing GPA includes grades in courses taken in the freshman year.
7. Nursing Theory GPA. Average of the nursing student's grades in theory courses completed in the sophomore, junior, and senior years.
8. Clinical Practicum Grades. Pass or fail grade in student's clinical practicums in sophomore, junior, and senior years.

9. Faculty Evaluation. Written evaluation of the nursing student's performance in his or her practicum. This evaluation is done each semester by the faculty.

10. Special Progression Students. Students who have received a grade less than a "C" in a nursing theory course or a failing grade in a clinical practicum.

Research Design

The research design was descriptive and nonexperimental because the researcher observed data and did not actively manipulate any variables. Permission to review student records was obtained from the Department of Nursing (Appendix B); permission to conduct the study was obtained from the Institutional Review Board, Human Subjects (Appendix C).

The setting for this study was one university in northern California. This nursing program is accredited by the National League for Nursing and approved by the appropriate state agency. The sample consisted of records of students who passed and students who failed the NCLEX-RN from 1982 to 1988. Ninety-four student records were reviewed.

Scope and Limitations

The sample was one of convenience; it included records of students who passed and failed the NCLEX-RN. A limitation of the study was that the data were from only one nursing education program. Therefore, the results cannot be generalized to any other setting. In addition, there may be intervening variables that were not accounted for in identifying common characteristics of people who failed the NCLEX-RN.

Chapter 2

CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

Conceptual Framework

Performance on the NCLEX-RN can best be understood through application of Schwirian's (1981) model of nursing performance (see Figure 1). The development of this model was motivated by the lack of a systematic model to evaluate nursing performance. Schwirian has identified seven variables or "blocks" pertaining to nursing performance:

1. Academic achievement block includes SAT, ACT, and GPA scores.
2. Family of origin characteristics block includes role of women orientation, socioeconomic status, image of nursing, and presence or absence of another health professional in the family.
3. Demographic characteristics block includes race, marital status, and age.
4. Personal characteristics block includes role orientation, alienation, intrinsic motivation, and self-concept.
5. Employment characteristics block includes agency type, unit, clinical area, organization of nursing, personnel, and degree of baccalaureate accreditation.
6. Nursing school characteristics block includes school type and size.
7. Nurse career behavior block includes job performance, satisfaction/dissatisfaction, postgraduate education, and professional activities.

BLOCK 1: ACADEMIC ACHIEVEMENT

	ACT	SAT
High school rank		
Achievement	NLN	PNC
"Aptitude"		
	Entering GPA	
Attrition		
	Final GPA	
	SBE Scores	

BLOCK 3: DEMOGRAPHIC CHARACTERISTICS

Demographics

BLOCK 4: PERSONAL CHARACTERISTICS

Role Orientation
Alienation
Intrinsic motivation
Self-concept

BLOCK 5: EMPLOYMENT CHARACTERISTICS

Agency type
Unit
Clinical area
Organization of nursing personnel
Degree of "bureaucratization"
Preeminence of medical model
in organization of patient care
Clientele served
Health center services provided

BLOCK 2: FAMILY OF ORIGIN CHARACTERISTICS

Race	Role of Women
	Orientation
Socioeconomic status	
	Image of nursing
health	Presence/absence of other
	professionals in family

BLOCK 7: NURSE CAREER BEHAVIOR

Job Performance (Six-D-Scale)
Satisfaction dissatisfaction
Attrition/continuation
Interagency mobility
Intraagency mobility
Postgraduation education
Professional activities (nonjob)

BLOCK 6: NURSING SCHOOL CHARACTERISTICS

School type
Associate Degree/Diploma/ Baccalaureate
Size
Director involvement with students
Continuity of contact
Affiliation with primary employer
Curriculum orientation/organization

Figure 1. The Model Relevant Variables and Research Questions Related to Prediction of Nurse Performance

Note. From "Towards an explanatory model of nursing performance," by P. Schwirian, 1981, Nursing Research, 30, 148.

Schwirian (1981) also identified four relationships among variables in separate blocks:

1. Relationships between "metagroups" or related variables (box-to-box).
2. Relationships among grouped variables (within box).
3. Relationships between elements of one group of variables and elements of another group of variables (box element-to-box element).
4. Relationships between a "metagroup" or related variable and elements of another variables group (box-to-box element).

Even though Schwirian identified seven block variables important to nursing performance, this study used only the following: (a) academic achievement, (b) demographic characteristics, and (c) nursing school characteristics. Related literature cites these three characteristics as having the greatest impact on NCLEX-RN performance.

Review of Related Literature

The nursing literature in the past 6 years demonstrates a lack of research on the NCLEX-RN. One reason for the paucity of studies is that the NCLEX-RN was first given just 6 years ago. Therefore, study of the NCLEX-RN is a new area in nursing research.

Students who successfully complete a baccalaureate nursing program and later fail the NCLEX-RN are a cause for concern to faculty members and administrators (Quick, Krupa, & Whitley, 1985). One of the reasons for this concern is that students who fail will not be able to enter the work force. If these students could be identified early enough, faculty might then be able to provide assistance to those students and prevent them from failing their NCLEX-RN.

Academic Achievement

Of the studies done in the past 6 years, most concentrate on academic achievement and the NCLEX-RN. Glick, McClelland, and Young (1986) studied an integrated baccalaureate nursing program and performance on the NCLEX-RN. This study used an ex post facto correlational design. The variables studied were high school rank, grade point average, college admission test scores, and grades in all required prenursing and nursing courses. Grades in nursing theory constituted the one variable that was found to be statistically significant in predicting success on the NCLEX-RN. McKinney et al. (1988) found significant positive correlations among cumulative GPA, the Mosby Assess Test, preentrance test scores, prenursing course grades, nursing theory, clinical GPA, and NCLEX-RN performance.

Whitley and Chadwick (1986) studied baccalaureate nursing students and found that those students who entered the program with low SAT scores and low cumulative and science GPAs, and who scored below the class mean on nursing examinations, were at significant risk for failure of the NCLEX-RN. Allen, et al. (1988) identified students at risk for academic difficulty and found that the preadmission cumulative GPA was the most consistent predictive variable for all outcomes. All four of these studies demonstrate a correlation between academic achievement and NCLEX-RN results, even though different variables were used to represent academic achievement. According to Schwirian (1981), such variables are still considered to be in the academic achievement block.

Demographic Characteristics

The literature search revealed few studies that examine demographic characteristics and the NCLEX-RN. Allen et al. (1988) found that students' age, marital status, and employment status had virtually no effect on the outcome of

the test. However, Froman and Owen (1989) found that older students passed the NCLEX-RN at a higher rate than younger students. Furthermore, Smith (1968) studied noncognitive variables and academic achievement and found that students who were successful in passing the test were more mature, both emotionally and chronologically, were married, and were more achievement oriented. Allen et al. (1988) studied nursing students but did not relate specifically to the NCLEX-RN.

The California Board of Registered Nursing in 1983 conducted an adverse impact study on ethnic background and performance on the NCLEX-RN. The Board used two different techniques to determine whether success rates constituted adverse impact. The first was the success rate, which was less than 80% of the rate for the most successful comparison group. The second technique was the use of a chi-square statistical test. The test helped to determine if the differences were solely by chance. According to the results, White examinees achieved the highest scores of all ethnic groups, with a 90.1% passing rate, followed by Hispanics with 60.1%, Blacks with 52.4%, Asians with a 31.2% passing rate, and finally, Filipinos with 12.8%. This study did not find age or sex to have an impact on the NCLEX-RN passing rate.

Nursing School Characteristics

The nursing literature search revealed that most of the published studies on the NCLEX-RN and nursing education are done with baccalaureate nursing programs. However, the search revealed no studies that reflect practicum evaluations of the students and the NCLEX-RN.

Summary

An extensive review of the literature has demonstrated that there is a need to find out if academic achievement, demographic characteristics, and school of nursing practicum evaluations can help to identify characteristics of students at

risk for failing the NCLEX-RN. The literature is particularly weak in the area of demographic characteristics and nursing program faculty evaluations as they relate to identifying characteristics of people who will fail the NCLEX-RN. This study attempted to provide data for more extensive research.

Chapter 3
THE METHOD
Research Design

The design was descriptive and nonexperimental. This type of research was appropriate, because the researcher was describing systematically the facts and characteristics of a given population. This study did not necessarily seek or explain relationships or try to identify meanings and implications (Isaac & Michael, 1985, p. 46). The researcher identified the characteristics of students who fail the NCLEX-RN from one baccalaureate nursing program. Schwirian (1981) has identified variables which are important to nursing performance. This study used the following variables: (a) academic achievement, (b) demographic characteristics, and (c) nursing school characteristics.

Sample Population

Data were gathered from records of nursing students who passed and failed the NCLEX-RN examination. A total of 94 records was reviewed. Forty-eight records were from students who failed, and 46 were from students who passed the NCLEX-RN.

Data Collection

The researcher obtained approval to conduct this research study from the chairperson of the nursing education program at a university in northern California and the Institutional Review Board, Human Subjects. The Admission and Records Department also gave permission to conduct this study (see Appendix D).

The data were collected in the Spring semester, 1989. The researcher randomly selected records of 46 students who passed and 48 records of those who

failed the examination. The researcher used a random number table to ensure that the records were selected randomly. Confidentiality was maintained when reviewing the records by coding each one with a number.

Analysis of the Data

The data collected were analyzed by the use of descriptive statistics, which describe the characteristics of the data from a sample (Wilson, 1985, p. 438). The descriptive statistics used to analyze the data were chi-square and t -test.

After the researcher collected the data on a spread sheet (Appendix E), the data were then entered into a computer. With the help of a statistician, the data were categorized to derive statistics on each component in the variable. The computer then analyzed the data and produced the chi-square test for the variables which were frequencies. The t -test was used for the variables that were score related.

Chapter 4

ANALYSIS AND INTERPRETATION

The purpose of this study was to identify characteristics of people who failed the NCLEX-RN examination. The data collected for this study were analyzed by using the predetermined characteristics that were identified and then using either t-test or chi-square to determine if they were statistically significant. The data were collected by randomly reviewing student records of those who passed or failed the NCLEX-RN examination. The researcher looked for predetermined characteristics in each record. The data were categorized into 14 variables and were compared to those who passed and those who failed the examination. The variables are listed below in Figure 2.

Predetermined Variables

1. GPA Cumulative	8. Sex
2. GPA Prenursing theory	9. Year of Completion
3. GPA Nursing Theory	10. Number Times Failed
4. Age	11. Special Progression Program
5. SAT Verbal	12. Faculty Evaluation
6. SAT Math	13. Ethnic Background
7. Clinical Practicum Grade	14. Transfers from Other School

Figure 2. Predetermined Variables Used for Comparison.

To compare people who failed the NCLEX-RN and those who passed, t -tests between independent means were computed on variables on an equal-interval scale of measurement. Results of these t -test comparisons are shown in Table 1.

Students' cumulative GPAs since their entry to the University were found to differ significantly ($p = .0001$) between those students who failed and those who passed. On a 4-point scale, with A = 4, to D = 1, those students who failed the NCLEX-RN had a cumulative GPA of 2.78, which was significantly below the cumulative GPA of those who passed the NCLEX-RN, whose GPA averaged 3.13.

Pre-nursing GPAs were found to differ significantly as well ($p = .0004$). Students who failed the NCLEX-RN had a pre-nursing GPA of 2.47, which was significantly below the 2.77 pre-nursing GPA of students who passed.

Students' nursing theory GPA was also found to differ significantly ($p = .0001$) between those students who failed and those who passed. Those students who failed the NCLEX-RN had a nursing theory GPA of 2.41, which was significantly below the nursing theory GPA of those who passed the NCLEX-RN, whose GPA was 2.94.

Age was a demographic variable, and it was interesting to see if age influenced whether one would pass or fail the NCLEX-RN. Students who failed the NCLEX-RN averaged 26.94 years, which was slightly below the age of students who passed, whose average age was 30.15. Age was significant ($p < .05$).

It was discovered in collecting the data that not all nursing students had SAT scores. In fact, the SAT is not a prerequisite for entering the nursing education program. However, it is a prerequisite for entrance into the university if the student is applying as a freshman. Consequently, the sample sizes were vastly reduced. There were only 15 people who failed the NCLEX-RN and who had

Table 1

Results of the T-Test Comparisons Between
Students Passing and Failing the NCLEX

Group	<u>n</u>	M	SD	t	df	<u>p</u>
<u>GPA Cumulative</u>						
Failers	48	2.78	0.32	-4.71	92	.0001*
Passers	46	3.13	0.40			
<u>GPA Pre-Nursing</u>						
Failers	48	2.47	0.47	-2.92	92	.004*
Passers	46	2.77	0.52			
<u>GPA Nursing Theory</u>						
Failers	48	2.41	0.35	-6.07	92	.0001*
Passers	46	2.94	0.48			
<u>Age</u>						
Failers	48	26.94	4.80	-2.43	92	.017*
Passers	46	30.15	7.76			
<u>SAT Verbal</u>						
Failers	15	338.67	72.69	-0.98	19	.340
Passers	6	371.67	60.80			
<u>SAT Math</u>						
Failers	15	420.00	68.77	1.28	20	.214
Passers	7	354.71	173.81			

*p < .05.

SAT scores in their records, and only 7 people who passed the NCLEX-RN showed a SAT score. Consequently, comparison of SAT scores was not as reliable a factor in this study as in previously reported comparisons based on larger sample sizes. The results were not significant at $p < .05$ level, and there was little statistical difference between failers and passers on either the math or the verbal portion. As can be seen from Table 1, of those students whose records showed SAT scores, those who passed the NCLEX-RN had higher scores on the verbal portion, and those who failed scored higher on the math portion.

Chi-square tests were computed to compare people who failed the NCLEX-RN and those who passed, cross tabulating the failers and passers with variables on non-integer scales of measurement. The results of these chi-square tests are shown in Table 2.

The clinical practicum variable indicated which students passed or failed the practicum. No significant difference ($p > .05$) was noted in the percentage of students who passed or failed the NCLEX-RN in terms of whether they had passed or failed the practicum. There were, however, very few students ($n = 3$) who failed the practicum.

Regarding the sex variable, no significant difference was noted in the percentage of students who passed or failed the NCLEX-RN in terms of whether they were male or female. There were, however, very few male students.

The year of completion variable, 1986, 1987, and 1988, did not reveal a significant difference in the percentage of people who passed the NCLEX-RN in terms of the year in which they took the examination. Students who completed the nursing program and took the examination in 1988 showed a 66% pass rate. In 1986 and 1987, fewer students passed. Only 28% passed in 1986, and in 1987, 51% passed.

Table 2

Results of Cross-Tabulation of
Pass-Fail and Student Characteristics

Characteristic	Failers		Passers		Chi-Square	p
	<u>n</u>	%	<u>n</u>	%		
<u>Clinical Practicum</u>						
Failed	6	86%	1	14%		
Passed	42	48%	45	52%	2.29	.130
<u>Sex</u>						
Male	1	33%	2	67%		
Female	47	52%	44	48%	.001	.970
<u>Year of Completion</u>						
1986	18	72%	7	28%		
1987	19	49%	20	51%		
1988	10	35%	19	66%	7.65	.220
<u>Number of Times Failed</u>						
None	0	0%	42	100%		
One or more	48	92%	4	8%	75.57	.0001*
<u>Special Progression</u>						
Yes	21	81%	5	19%		
No	27	40%	41	60%	11.10	.0009*
<u>Faculty Evaluation</u>						
Positive	46	51%	44	49%		
Negative	2	50%	2	50%	0.00	1.00
<u>Ethnic Background</u>						
Caucasian	14	30%	33	70%		
Black	5	71%	2	28%		
Hispanic	6	67%	3	33%		
Asian	9	69%	4	31%		
Filipino	14	78%	4	22%	17.41	.0016*
<u>Transfers</u>						
Transfers	33	45%	40	55%		
Non-Transfers	15	71%	6	29%	3.50	.0614

* p < .05

The variable indicating the number of times the NCLEX-RN had been failed showed that there were significant differences ($p = .0001$) in the percentage of people who passed or failed the NCLEX-RN in terms of whether or not the exam was repeated. Of those who took the test again, only 8% of those who failed once eventually passed the exam.

As to the "special progression" variable, i.e., whether students were in a special program as a result of having obtained less than a "C" in a nursing theory course, or having failed their clinic practicum, there were differences noted in the percentage of people who passed or failed the NCLEX-RN. Sixty percent of students who passed were not in such a program, whereas 19% of students who were in a program passed the NCLEX-RN. The interesting result here is that, of those people who were in a special progression program, 81% failed; only 40% of those who were not in a program failed. In terms of faculty evaluation (either positive or negative), no significant difference was noted in the percentage of students who passed or failed the NCLEX-RN in terms of whether they received a positive or negative faculty evaluation.

The ethnic background variable (Black, Hispanic, Asian, or Filipino) showed that there was a significant difference ($p = .0016$) in the percentage of people who passed or failed the NCLEX-RN in terms of ethnic background. All minority groups had a higher failure rate than the Caucasian group. Seventy percent of Caucasian students passed, whereas only 22%-33% of minority students passed.

The criteria for the final variable involved the transfer status of the student. Here, no marginally significant difference ($p = .0614$) was noted in the percentage of students who passed or failed the NCLEX-RN in terms of whether they had been transfer or non-transfer students. Non-transfer students failed the exam at a rate of 71%, while the transfer students had a 45% failure rate.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

This study used a descriptive and nonexperimental research design to determine the characteristics of students who failed the NCLEX-RN examination. This was accomplished by reviewing the students' records for predetermined variables. The common characteristics were determined through analysis to identify the characteristics that were statistically significant. Schwirian (1981) helped the researcher focus on three important variables to nursing performance: (a) academic achievement, (b) demographic characteristics, and (c) nursing school characteristics.

Conclusions

The conclusion of this study is that there were common characteristics among students who failed the NCLEX-RN examination. The sample was limited to people who attended one university in northern California. The characteristics that surfaced most frequently were: (a) lower cumulative GPA, (b) lower pre-nursing GPA, (c) lower nursing theory GPA, (d) younger age in the year test was taken, (e) number of times failed, and (f) enrollment in a special progression program.

Studies by McKinney et al. (1988), Whitley and Chadwick (1986), and Allen (1988) agreed with these findings that academic achievement helps predict whether a student will or will not pass the NCLEX-RN. Allen et al. (1988) did not find demographic characteristics to be a likely influence on whether or not people failed the NCLEX-RN. However, this study did find age to be a characteristic, which is similar to the findings regarding the age factor by Froman

and Owen (1989), who found that older students passed the NCLEX-RN at a higher rate.

The California Board of Registered Nursing (CBRN, 1983) found that Caucasian examinees passed at a more frequent rate than did students from other ethnic groups. Furthermore, this study found that the minority groups failed in the same order, as stated previously: Hispanic, Black, Asian, and Filipino.

The results of this study are similar to those of other studies that have been conducted. However, this study has uncovered two additional characteristics not identified in the literature: (a) number of times failed, and (b) special progression program.

Recommendations

The researcher recommends that further studies be conducted in more nursing education programs in northern California. This study was limited due to the sample size. To view a larger group of people who failed the NCLEX-RN, this study would need to be conducted in more schools.

The researcher also recommends that this study be done in a predominantly minority school to look at their failure rate and see if results would be the same. If the results are found to be similar, then research would need to be conducted on the NCLEX-RN examination to determine if cultural bias exists.

The researcher recommends that a longitudinal study be done whereby students could be observed when they are first admitted to the nursing program. The students who are already at risk of failing at the time of admission to the school of nursing could be placed in a special program that would help them to pass the NCLEX-RN. This action would also create student awareness of the need for assistance. The final recommendation is to study the curriculum in 1988

at the schools of nursing in northern California to ascertain what changes have occurred, since that year had the lowest failure rate.

REFERENCES

References

- Allen, C., Higgs, Z., & Holloway, J. (1968). Identifying students at risk for academic difficulty. Journal of Professional Nursing, 4, 113-118.
- Froman, R., & Owen, S. (1989). Predicting performance on the National Council Licensure Examination. Western Journal of Nursing Research, 11, 334-346.
- Glick, O., McClelland, E., & Young, J. (1986). NCLEX-RN Predicting the performance of graduates of an integrated baccalaureate nursing program. Journal of Professional Nursing, 2, 98-103.
- Isaac, S., & Michael, W. (1985). Handbook in research and evaluation. San Diego, CA: Edits.
- McKinney, J., Small, S., O'Dell, N., & Coonrod, B. (1988). Identification of predictors of success for the NCLEX and students at risk for NCLEX failure in a baccalaureate nursing program. Journal of Professional Nursing, 1, 55-59.
- National Council of State Boards of Nursing. (1988). More graduate nurses fail R.N. licensing exams. Modern Health Care, 9.
- Quick, M., Krupa, K., & Whitley, T. (1985). Using admission data to predict success on the NCLEX-RN in a baccalaureate program. Journal of Professional Nursing, 12, 364-367.
- Schwirian P. (1981). Toward an explanatory model of nursing performance. Nursing Research, 30(4), 147-253.
- Weinsten, E., Brown, I., & Wahlstrom, M. (1980). Characteristics of the successful nursing student. Journal of Nursing Education, 19, 53-59.
- Whitley, M., & Chadwick, P. (1986). Baccalaureate education and NCLEX: The causes of success. Journal of Nursing Education, 25, 94-101.
-

References (Cont.)

- Wilson, H. (1985). Research in nursing. Menlo Park, California: Addison-Wesley.
- Woodham, R., & Taube, K. (1986). Relationships of nursing program predictors and success on the NCLEX-RN examination for licensure in a selected associate degree program. Journal of Nursing Education, 25, 112-117.
- Yang, J., Glick, O., & McClelland, E. (1987). Academic correlates of baccalaureate graduate performance on NCLEX-RN. Journal of Professional Nursing, 9, 298-305.

APPENDICES

APPENDIX A
Consent Request Letter

29 March 1989

Dean of School of Nursing

Dear Dean:

I am currently a graduate student attending _____ University and in the process of writing a thesis on the characteristics of students who fail the NCLEX-RN examination.

I am seeking your permission to collect data at _____. I will assure you that there will be anonymity in relationship to _____ and its nursing students who are being addressed in this thesis.

Thank you for your consideration in this matter.

Susie E. Brown

APPENDIX B

Consent Letter

30 March 1989

To: Susie E. Brown

From: Professor and Chair
Department of Nursing

Re: Data Collection for Thesis

This is to verify that you have our permission to collect data related to the characteristics of students who do not pass the NCLEX-RN examination. When you are ready to collect this data, contact me or Dr. _____ to discuss how we can best assist you.

If you need more information, let me know.

APPENDIX C

Consent Letter

April 25, 1989

Ms. Susie Brown

Dear Ms. Brown:

Your human subjects protocol number #7489 has received final approval from the Institutional Review Board, Human Subjects. Attached is a copy of the final approval form with the signatures of the Chairman of the Institutional Review Board, Human Subjects, _____ and the Associate Academic Vice President for Graduate Studies and Research, _____.

The Institutional Review Board, Human Subjects must be notified in writing of any proposed changes to this proposed protocol, and approval must be granted in writing before any change is instituted.

If you have any questions, please contact _____ at _____
_____.

Congratulations and good luck with your research!

Sincerely,

Contracts and Grants Coordinator

APPENDIX D

Consent Letter

August 18, 1989

Ms. Susie E. Brown

Dear Ms. Brown:

Although you may have talked with _____ of Admissions and Records, about your request to collect student data, this letter is to formalize that request.

Please be aware that release of specific individual student data is against state and federal regulations. Should you need assistance and direction at this point, please contact _____ who will be most happy to help you.

Good luck on your project.

Sincerely,

Associate Executive Vice President

cc: Chairman of Department of Nursing
Associate Director of Admissions and Records
Security Officer Institutional Research

APPENDIX E
Data Collection Form