

**ADMISSION GRADES AND COLLEGE PERFORMANCE
AS DETERMINANTS OF BOARD EXAMINATION
RATINGS OF 1996 BSN GRADUATES IN
SELECTED NURSING SCHOOLS
IN ILOILO CITY**

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Abstract: The study aimed to determine whether there is a relationship between board performance and admission grades, college performance and other selected factors. The graduates' college performance and board rating did not vary significantly according to residence, type of high school graduated from, high school general average (HSGA) and academic ranking. College performance did not also vary according to sex, but the male graduates performed better in the board exam than their female counterparts. A significant positive correlation between NAT SA scores and board rating was noted. HSGA was found to be a good determinant of college performance, but not of board performance.

Introduction

The Problem

With strict admission requirements, such as Nursing Aptitude Test (NAT) scores of 70 percent and above, and an upper 40 percent ranking in high school, plus the provision of adequate up-to-date training, proper supervision, guidance and motivation, nursing graduates are expected to perform well in the board examination. It has been observed, however, that board performance rating has been deteriorating in the past years, despite strict procedures in screening nursing applicants. The unsatisfactory performance of the nursing graduates in the board examinations has been attributed to many factors, among them admission requirements.

Objectives of the Study

The study was conducted to find out whether there is a significant relationship between selected admission requirements, such as admission grades, college performance and board performance of the BSN graduates of 1996. The study also determined the relationship between selected

factors such as sex, location of residence and type of high school graduated and board performance. Furthermore, the study determined the predictive ability of admission grades and college achievement on board performance of the BSN graduates of 1996.

Theoretical and Conceptual Framework

Rogers proposes that the environment plays a major role in the development of an individual. Nursing students trained in an environment that encourages and facilitates learning are expected to perform better than those trained in less conducive environments. It is also assumed that learning and experiences gained by a person in the past can contribute to how he learns in the future. A good performance in high school, in the aptitude tests and in college may be good preparations for board performance. The diagram below illustrates the assumed links of the study variables.

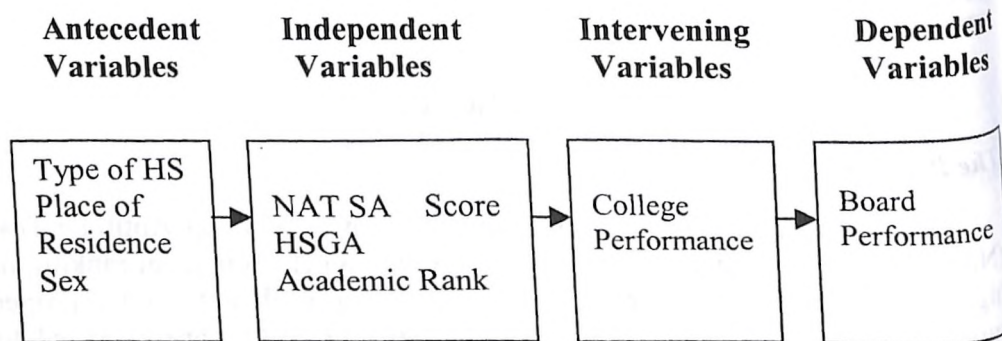


Figure 1. Assumed Flow of Relationship between Variables.

Hypotheses

1. The higher the NAT SA scores, HSGA, and high school academic ranking, the higher the academic performance of the graduates.
2. The higher the grades in college of the nursing graduates, the higher their board examination rating.

3. Admission grades (NAT SA scores, HSGA, high school academic ranking) are significantly related to board rating even when college performance is controlled.
4. Admission grades (NAT SA scores, HSGA, high school academic ranking) and college performance are significant determinants of board examination performance.

Methodology

This is a descriptive-correlational study. The respondents were 207 BSN graduates of three colleges of nursing in the City of Iloilo in March 1996 and took the Nurses' Board examination for the first time in April and November, 1996. Data for this study were taken from the offices of the registrars and deans of the schools. Permission to collect and use the data was sought from the school administrators.

The data were processed and analyzed using the SPSS software. For the descriptive analysis, frequency distribution and the mean were the main statistical tools used. For the analysis of correlation between variables, Pearson Product Moment Correlation ® was used in most cases.

Major Findings

Characteristics of the Respondents

The 1996 BSN graduates of the three schools studied were mostly female (86.0 %). Almost one-third (32.4 %) of them reside in Iloilo City, another third live in the town proper of municipalities in Iloilo Province, while the rest live outside the town proper (Table 1). Slight more than half of them went to a public high schools (56.5 %), while the rest attended private high schools Table 1).

Table 1. Sex, Residence and Type of High School Graduated from of the Nursing Graduates

Indicators	Number (N=207)	Percent
Sex:		
Male	29	14.01
Female	178	85.99
Residence		
City	67	32.37
Town Proper	66	31.88
Outside Town Proper	74	35.75
Type of High School Graduated From		
Public HS	117	56.52
Private HS	90	43.48

The graduates obtained an average NAT score of 557, a high school general average of 85 percent, an average college grade 82 percent and an average board rating of 75 percent (Table 2).

The graduates' college performance did not vary significantly according to sex, residence and type of high school graduated, HSG and academic ranking. In the board examination, however, the male nursing graduates performed significantly better than their female counterparts. On the other hand, the graduates' residence and type of high school graduated from did not significantly

Table 2. Graduates' Mean Ratings in Admission Test, High School General Average, College Performance and Board Performance

Variables	Mean (N=207)
NAT SA	557
HSGA	85
College Performance	82
Board Performance	75

*Variation in College Performance and Board Rating
According to Sex, Residence, Type of High School*

The college performance of nursing graduates did not significantly vary according to their sex, residence and type of high school graduate from. The board performance of the graduates, however, was found to vary according to the respondents' sex, but not according to the students type of high school graduated from, and residence.

The male graduates performed better in college than their female counterparts. The type of high school graduated from and residence did not significantly influence their performance in the board.

Correlation Analysis

The data show that high school general average and NAT SA scores are significantly correlated with college performance ($r=.318$ and $r=.169$, respectively). The positive correlations between the two pairs of variables which were significant at .05 percent level means that the higher the high school general average and the NAT SA scores of the graduates, the higher their grades in college.

The correlation analysis also showed a significant positive correlation between NAT SA scores and board rating ($r=.344$). The graduates' board rating tended to increase as their scores in the NAT SA increased. The graduates who performed well in the NAT SA also performed well in the board examination (Table 3).

High school general average, however, is not significantly correlated with board rating ($r=.139$). This suggests that high school general average does not have a significant bearing on board performance.

The data further show that academic ranking in high school is not significantly correlated with college performance ($r=.003$), however, it was significantly correlated with board performance ($r=.160$). The Pearson r value, however, indicates that the degree of correlation between the two variables is negligible. The positive correlation means that students belonging to the upper 40 percent of their high school class tended to

perform better in the board examination than those who belonged to lower than 60 percent.

The graduates who performed well in college also tended to perform well in the board examination ($r=.436$).

Table 3. Correlation Coefficient Between Admission Requirements and College Performance and Board Rating

Variables	College Performance	Board Performance
NAT SA	0.318*	0.344*
HSGA	0.169*	0.135ns
College Performance	1.000	0.436*
Academic Ranking	0.003ns	0.160*

*Significant at 0.05 level ns Not significant at 0.05 level

Relationship Between Admission Requirement and Board Rating, Controlling for College Performance

NAT SA remained to be significantly related to high school general average and academic ranking when college performance was controlled. However, its relationship to board performance vanished when college performance was controlled. Table 4 shows that the low positive, but insignificant relationship between HSGA and board performance remained insignificant, but became negligible and negative when college performance was controlled. These findings suggest that the relationship between high school general average and academic ranking is pretty stable, but the connection between high school general average and board performance is spurious.

Table 4. Relationship Between Admission Requirement and Board Rating, Controlling for College Performance

Variables	NAT SA	HSGA	Board Performance	Academic Ranking
NAT SA	1.000	0.241*	0.069ns	-0.179*
HSGA	0.241*	1.000	-0.046 ns	0.045 ns
Board Performance	0.069ns	-0.046ns	1.000	-0.195ns
Academic Ranking	-0.179*	0.045 ns	-0.195*	1.000

*Significant at .05 level

ns – not significant at .05 level

The result of the regression analysis shown in Table 5 shows that HSGA and NAT SA are significant determinants of college performance. The coefficients were as indicated by Coefficient Bs which are significant at .05 level.

Table 5. Results of the Multiple Regression of the Three Independent Variables on College Performance as Measured by the CGA for the 3rd and 4th Year Combined

Variable	Coefficient B	t-value	Significance
NATSA	0.008531	4.814	0.0000*
HSGA	0.085289	2.537	0.0119*
Academic Rank	0.096143	0.321	0.7486ns
Constant	70.026753	22.813	0.0000

*Significant at 0.05 level

ns Not significant at 0.05 level

On the other hand, NAT SA, high school academic ranking and college performance were found to be significant determinants of board performance of BSN graduates (Table 5).

Table 6. Results of the Multiple Regression of the Three Independent Variables and Intervening Variable on the Board Performance as Measured by the Board Performance Ratings

Variable	Coefficient B	t-valueT	Significance
College Performance	1.127264	5.474	0.0000
NAT SA	0.020549	3.744	0.0002
HSGA	0.067138	0.670	0.5035
Academic Rank	-2.341111	-2.660	0.0084
Constant	-30.676430	-1.804	0.0727

Conclusions

Based on the findings of the study, the following conclusions are drawn.

1. Sex, residence and type of high school graduated, HSGA and academic ranking do not significantly influence the graduates performance.
2. The graduates college performance did not vary significantly according to any of the independent variables considered. The male students performance as well as the female students. It did not also vary according to the students residence and type of high school graduated from.
3. In the board performance, male BSN graduates performed better than their female counterparts. Residence, type of high school graduated and HSGA do not significantly influence the graduates' board performance.
4. Board performance rating is significantly related to NAT SA and high school academic ranking.

5. College performance is significantly related to NAT SA and HSGA.

6. Board performance is significantly related with college performance. The higher the college performance, the higher their board performance.

7. When college performance is controlled, NAT SA and academic ranking still significantly influenced board performance.

8. NAT SA and HSGA are significant predictors of college performance.

9. NAT SA, high school academic ranking and college performance are significant predictors of board performance of BSN graduates of 1996.

Recommendations

1. The College Committee on Admissions should consider the student's over-all average in fourth year and NAT SA as the important criteria in screening candidates for admission to the College of Nursing. The former reflects the overall performance of the candidate and the latter the results of the scores in a standardized entrance examinations.

2. The NAT SA and HSGA should be given higher percentage requirement since they reflect college performance.

3. Academic ranking should be considered another priority since it reflects board performance.

5. This could be further utilized as another screening procedure in order to select the cream of the crop.

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