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AUTHOR Larkin, Paul G.
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ABSTRACT

Faced with the need to replace a "waiting list" system of nursing program admissions with a more equitable selection process, Prince George's Community College examined the criteria leading to successful completion of the five-part State Board Examinations (SBE). Resultant criteria would then be used to place applicants into a "qualified pool" from which individuals would be randomly selected for admission. An analysis was made of the records of 159 nursing graduates of 1976 on demographic variables, SBE sub-test scores, Comparative Guidance and Placement tests (CGP) taken at entry, process variables, grade point average (GPA), and nursing and science course repeats. CGP test scores appeared to discriminate between SBE passes and failures. In a second study, these variables were submitted to regression analysis, with an established criterion of a midpoint score of 50 on the CGP related to the number of SBE sub-tests passed. Fifty-one subjects with complete variable sets were analyzed, with the criterion variable accounting for 56% of the variance in the number of SBE subsets passed and the CGP reading score alone accounting for 43%. The addition of the other variables explained 69% of the variance, supporting the possible establishment of a score of 50 on the CGP as one requirement for the "qualified applicant" pool. (RT)

PRINCE GEORGE'S COMMUNITY COLLEGE

Report No. 77-21: Admission Test Results as Criteria for Entrance into the Nursing Program

Statement of the Problem

In the past the College has had up to four hundred applicants per year for every one hundred openings in the Nursing program. The question of fairness arises, who will be admitted and who will not. Recent experience has created a note of urgency as to screening criteria for admissions.

A disproportionately high percentage of fall 1976 students completing their preparation failed to pass the State Board Examinations (SBE's). While 17 percent failed the SBE's in the spring cycle, 29 percent failed in the fall. The total program is regularly evaluated on the basis of percentage passing. Accreditation itself is threatened unless means are found to screen candidates effectively, and insure a higher pass rate.

The use of entrance test results as one basis for establishing minimal qualifications for admission to the program is therefore the subject matter of the present report. Once minimum standards have been identified, these standards will be further evaluated as more information becomes available. Meanwhile, standards are intended which will be fair to County citizens, and effective in screening in candidates who have an excellent chance of passing the State Board Examinations.

A procedure has been proposed whereby a pool of qualified applicants will be considered for program entry on the basis of objective criteria. A randomly selected group would be chosen from this pool to fill the program openings available. Part of the criteria will be completion of academic pre-requisites. Academic pre-requisites would include the fulfillment of all high school requirements or the equivalent demonstration of achievement, and the fulfillment of course pre-requisites. In other words, the qualifying records would have to be complete in addition to a battery of test scores used in the College admissions process. The test battery, which will be outlined later, would also serve as a screening device to "screen in" to the eligible "qualified candidates" pool. These applicants will thus be students who have a reasonable and probable chance of passing the SBE's. The random selection would be made from the qualified candidate pool, so as to identify those persons who will actually be in the Nursing program.

Scope and Limits

The present report is limited in scope to admissions test results as criteria for entrance qualification for the Nursing program, given a program goal of minimizing percentages of graduates failing the State Board Examinations.

Literature Sources

In the process of a literature search, one study was identified as a useful model to be imitated in validating testing criteria. This study was a Nursing program study at Wayne County Community College serving the Detroit Metropolitan Area. A 1974 report by Della Goodwin and Rosemary Millick entitled "The Development of New Entrance Criteria for Nursing" included a useful summary of research abstracts (pp. 72-84). It was noted that previous research had focused on predicting success in the State Board Examinations. Factors most closely related to passing SBE's were identified as follows:

1. Grade point average,
2. Achievement test scores,
3. CGP scores, and
4. Biographical or demographic information.

Population for the Present Study

College records were examined covering several years in an attempt to establish historical trends in SBE performance in relation to admission test results. These test score records were so incomplete prior to 1976 that they proved useless for study purposes. The records of 159 Nursing graduates from calendar year 1976 who had taken the SBE were found to have sufficient information for analysis in terms of a number of variables. The majority of these graduates were white (81 percent). Most were women (91 percent). Their ages ranged from 20 to 58, with a median age of 27. Ninety-six had completed their preparation in the spring and 63 in the fall term.

Success in the SBE's compared with Demographic Variables

One hundred twenty-five (79 percent) of the graduates studied had passed all five SBE's. Thirty-four (21 percent) had failed at least one of the five examinations in the SBE battery. Of those graduates failing the SBE by failing at least one sub-test, nearly equal numbers were black and white. This meant that over two-thirds of the blacks and 12 percent of the whites failed at least one of the five examinations. With respect to sex, one of the 15 men and 33 of the 144 women failed. Eighteen fall graduates and sixteen spring graduates failed, representing 29 percent and 17 percent of the semester graduates respectively. The ranges of ages of those passing and those failing the SBE were nearly identical, as was the median age.

Sub-Test Results

Of the five SBE's, the psychiatric sub-test was the one most frequently passed (146 passed, 12 failed). The medical exam was the one most frequently failed (139 passed, 20 failed). Nineteen failed the "children" sub-test, seventeen the surgical sub-test, and thirteen the obstetrics sub-test. Test scores ranged from 100 to 794. Most of the graduates who failed the SBE failed one or two parts (12 failed one SBE sub-test, 10 failed 2). Two graduates failed all five SBE sub-tests.

Differences were noted when characteristics of each semester's graduates were examined. Nearly twice as many blacks graduated in the spring as in the fall. Seven of the 16 blacks passed in the spring as opposed to only one of 9 in the fall. A slightly larger proportion of the spring graduates who were white also passed all five SBE's (91 percent in the spring, 85 percent in the fall). More women graduated in the spring, and a larger proportion passed. The graduates did not appear to have a different profile in terms of age from one semester to the next.

Test Scores at Entry

Students entering the College are required to take six Comparative Guidance and Placement tests (CGP). The Reading and Sentences components of the CGP are designed to test basic language skills. They were especially designed to aid in placement in English courses and to predict success in liberal arts study, most particualrly in areas requiring reading and writing competence. There are three levels of the Math skills exam. The student is ordinarily allowed to choose a level according to the degree of challenge or difficulty, and the inclusion of subject matter for which the student has been prepared, such as Algebra.

In addition to these traditional achievement measures in language and number skills, the CGP includes three tests of special abilities for use in career education counseling and program placement. A Mosaic Comparison test measures perceptual speed and accuracy. The Letter Groups test examines inductive reasoning. The Year 2000 test measures integrative reasoning and ability to follow complex directions. The Letter groups and Year 2000 tests are claimed by the Educational Testing Service to indicate potential success in the health field, as well as other occupational or technical areas, such as business.

Test scores were avilable for less than half of all the Nursing graduates during calendar year 1976. They were available for approximately one-half who had passed the Nursing State Board Examinations (SBE), as well as for a little over one-third of those who had failed them.

Test Scores Related to SBE Performance

Differences between those who had passed the SBE and those who had failed could be related to the CGP test scores. This suggested that the tests could probably be used to discriminate likely later ability to pass the SBE's.

The highest Reading test score attained by a graduate *failing* the SBE was 60 (out of a possible 80 points). Those who achieved reading scores above 60 all passed the SBE. Those who passed and those who failed the SBE shared a score range of 30 through 60. But differences were visible within this range. Of the 55 persons scoring 50 or higher on the CGP Reading Test, only three failed the SBE. There was no score below which all students failed.

The distribution of CGP Sentences Test scores was similar to that of the Reading scores. All who scored above 59 passed the SBE's and all who scored below the forties in the Sentences Test failed. The group who scored 42 through 59 on Sentences included some graduates passing the SBE and some failing it.

Of the three CGP Math test levels, nine took Test C requiring no algebra, 29 took test D requiring one year of algebra, and 18 took test E requiring more than one year of algebra. In tests C and D, the score ranges for those who passed and those who failed the SBE were virtually the same. On test E the graduates who scored the highest all passed the SBE's, but lower socres were not useful to discriminate passers from failers.

On the "Year 2000" test, scores ranged from 30 through 75 with all those scoring above 63 passing the SBE's. Below 63, scores were shared by both those who passed and those who failed. Of the 51 graduates who scored above the national mean score of 50, only five failed in the SBE.

Similar patterns of test results were evident for the Mosaic Comparison test and the Letter Groups test. High scores (above 55 in Mosaic Comparison and above 50 in Letter Groups) were achieved solely by graduates passing SBE's. All lower scores were distributed among both those who passed and those who failed. Only three of the 51 scoring 50 or above on Mosaic Comparisons failed SBE, and six of the 62 scoring at least 50 on the Letter Groups test failed.

Of the 12 graduates failing at least one SBE, only one scored a 50 or above on all 6 CGP exams.

Spring and fall term graduates were compared and were not found to be meaningfully different in terms of CGP scores.

On the basis of this information, it is recommended that Nursing program applicants be initially required to take all six CGP tests and score a minimum of 50 on each to gain entry into the qualified candiates pool.

Thirty-six (or nearly half) of the seventy-four 1976 graduates for whom CGP information was available were found to have met these qualifications criteria. Of all the graduates meeting the proposed CGP criteria only one failed the SBE's.

Process Variables

After the Nursing students have entered the program they are required to successfully complete a course of study designed to prepare them for the SBE and a career in Nursing. Selected variables observable during this process were examined for relationship with SBE performance and potential use as criteria for graduation.

Grade Point Average

Data were collected on three grade point averages (GPA): Overall, Nursing, and Science. Grade point averages of 2.0 or above in Nursing and Overall were already required to qualify for graduation with an AA in Nursing. Therefore all such GPA's examined were at least 2.0 regardless of SBE performance. 1976 graduates with grade point averages as high as 3.11 in Nursing and 3.21 Overall failed the State Boards. Those with grade point averages above 3.0 in Nursing or Overall were more likely to pass all five SBE's.

There was no Science grade point average requirement for graduation, and thus there was more variability in this GPA. Those passing as well as those failing SBE's earned Science GPA's as low as 1.0 and as high as 3.7. Ten percent of those earning above a 2.0 GPA in Science (eleven persons) failed at least one SBE.

There were no notable differences between GPA's of fall and spring graduates with reference to GPA range or SBE performance.

Nursing and Science Course Repeats

Two-thirds of the graduates who had been required to repeat a Nursing or Science course failed at least one of the five SBE's. There were two chances out of three that a repeater of a Nursing course would fail one of the SBE's in both the fall and spring term.

For spring term graduates, however, who had repeated Science courses, there was a fifty-fifty chance of failing the SBE. For fall term graduates, the chance of a Science repeater failing the SBE was eight to one.

Performance on individual State Board Exams was examined compared with selected Nursing electives. In most instances, those who took the electives were slightly more likely to pass the exams. The differences were not large enough, however, for the courses to be considered strong predictors of SBE performance (or to be required for program completion).

Minimum Nursing program and overall GPA's of 2.0 are already requirements for graduation. It is suggested that a D or better be required in each Nursing course in order for the student to remain in the program. An alternative could be the requirement of a special individual examination and counseling of persons who do not successfully complete a required Nursing course, before permitting the course to be retaken.

Need for Further Study

The present report is the beginning of an effort to validate proposed Nursing eligibility criteria. Future research will include regression analysis as another means of checking performance in relation to proposed standards. The Wayne County project implemented this approach. In addition, improved test and progress records will be needed concerning each Nursing student, as a means of insuring objectivity and completeness of information in preparing Nurses to take the State Board Examinations.

Additional pathways have been proposed to qualify for the eligibility pool through study and achievement after taking the CGP's. This discussion is beyond the scope of the present report. The present analysis was limited to test evidence and academic performance in relation to success in the SBE's. Additional pathways which would insure a high pass rate in the SBE's will be evaluated when proposed through appropriate channels. The recommendation of certain CGP scores to establish a qualification pool thus represents only one way, and not the only way, to admit candidates into the Nursing program.

Future reports will review the Nursing program in terms of a number of "quantitative data elements" in time series, to permit a broader understanding of past trends and current directions in the Nursing program, as a context for development of admissions criteria.

Paul Larkin, Director
Institutional Research

Dianne Stiles
Research Analyst

5/27/77

PRINCE GEORGE'S COMMUNITY COLLEGE

Report No. 77-36: Regression Analysis of Entrance Tests as Predictors of Success in Nursing State Board Examinations

Introduction

This report was designed to assist in formulating eligibility criteria for an applicant pool for the Nursing program. For some years the program has not been completely "open door." It has been administered differently from other programs, insofar as candidates have been required to get onto a waiting list as a means of seeking admission. The waiting list has involved inequities. In addition to the unequal treatment of later aspirants, administration of the "first come, first served" rule has posed problems, and there have been understandable attempts to arrange exceptions to the waiting list procedures.

The decision to abolish the waiting list, and to do so promptly, has led to steps to arrange random-selection procedures with a pool of eligible candadates. In organizing eligibility standards, the faculty has indicated that it is both desirable and necessary for candidates to have a more highly probable chance of passing the State Boards. This criterion has been further defined as moderate ability as measured by admissions tests, serving as a predictor of eventual reasonable likelihood of success in the State Boards. Moderate ability would be specified to mean average performance, determined by the midpoint of the test range in the battery of admissions tests. This specification was seen to require evaluation, to see if it can be evidenced to be a reasonable way of persons entering the eligibility pool. If the tests in the battery were to make measurable contributions to prediction of success, the use of the tests would be judged reasonable for "screening candidates in" who would perform more effectively than self-selected candidates in passing the State Boards.

The emphasis here has been the prediction of success for persons in a class of individuals, i.e., those scoring within a range of entry test results. There was and can be no reasonable attempt to predict the performance of individuals. The issue of "false negatives" has been raised, as applying to individuals. This issue is being discussed concerning many similar applications of procedure today. Insurance companies, for example, charge higher auto accident rates for younger male drivers. This issue of "fairness to the individual," however, is beyond the scope of the present report. Criteria which exclude whole classes of individuals as defined by test scores clearly impact on individuals who "may have succeeded" by hard work and perseverance. Statistical analysis does not resolve problems such as this. Statistical analysis relates observables to measures of performance. Many different kinds of information need to be put together to resolve conflict such as the fairness issue, including experience discovered elsewhere and verification that the same kind of insights can be reasonably applied locally. In this context, "looking at our own data" is a reasonable and necessary step in policy formulation.

Scope and Limitations

This study was not a research study so much as an evaluation of the reasonableness of proposed eligibility standards. There was no sample drawn from a large population to which there would be later generalization. The records studied were those of students who had graduated and who had sat for the State Boards. There was a data limitation to those graduates for whom there were complete records. The question asked was what predicts success, given achievement of the A.A. degree and a chance to sit for the State Boards. The objective of the study therefore was to identify relationships. This information would not be used in isolation, but would be pooled with other available information from research literature and local experience to assist in formulating eligibility standards.

Population Studied

Data records for the entire set of 159 graduates from 1976 were reviewed. Complete data covering the variables of interest were available for 51 of these graduates. (These were computer-selected as having no missing values in their data.) The 51 records became the population for further study. The purpose was to evaluate proposed eligibility standards as predictors of success. This was not a "research" study in the sense of prior design and in-process controls, whether experimental or statistical. As mentioned previously, the immediate objective of the study was a comprehension of relationships between the independent variables and the criteria. This comprehension would assist policy and decision makers to formulate eligibility standards of a reasonable nature, with the nexus between admission test results and success in the State Boards being more clearly understood. Thus the population studied was not a universe of applicants, but a universe of those who sat for the State Boards.

Method of the Study

An existing comprehensive review of the literature identified previous regression studies identifying predictors of success in passing State Board Examinations. Variables identified as related to SBE passing were: 1) Grade point average, 2) Scores on the National League for Nursing Achievement tests, 3) Verbal aptitude scores, and 4) Demographic variables such as age and marital status. One study in particular, recently completed at Wayne County Community College, examined admissions criteria as predictors of nursing success. This study was used as a model for the present study. A major component of the Wayne County study was a stepwise regression analysis to assess predictors of nursing success defined by number of SBE's passed and individual SBE subtest scores. The Wayne County findings were consistent with the literature cited, indicating verbal and math CGP scores and grade point average to the strong predictors of SBE passing or subtest performance.

Replicating the main segment of the Wayne County Study, a stepwise multiple regression analysis was applied to data describing the 1976 PGCC nursing graduates. The multiple regression model produces a weighted linear combination of independent variables to predict a criterion variable. The result permits a perception of relationships within the data which can be used as a basis for policy or decision making, in combination with other information derived from experience or experiment.

Dependent variables examined as criteria of success were the total number of SBE's passed (all 5 must be passed for licensing) and each SBE score. Independent variables included student characteristics such as race, sex, and year of birth; the six CGP test scores and health occupation interest score from College entrance; and process variables such as course repeats and grade point averages. Measures of the relationship (Pearson product-moment coefficients) of independent variables to six dependent variables were examined (see Table 1).

Correlation Analysis

Correlation analysis suggested varying strength of relationship between the dependent and the independent variables. CGP admission test scores were found to be related to the number of State Board Exams (SBE's) passed, and to a somewhat more moderate degree with the individual SBE subtest scores. Only with respect to the Math and the Health Occupational Interest scores were the correlations weak and not statistically significant at the .05 level. Cumulative grade point average (GPA) was correlated somewhat more strongly with the individual SBE scores, and more moderately with number of SBE's passed. The GPA correlations were significant at the .001 level. Of four graduate charateristics considered, race was found to correlate moderately and significantly with total number of SBE's passed, and with the Surgical Board score. Regression analysis is given as follows (Tables 2-8).

Regression Analysis

When seven CGP scores were used to predict the number of SBE's passed, the resulting linear combination of the scores accounted for 56 percent of the variance in the number of SBE's passed. Thus 44 percent of the variance was found to be associated with variables other than CGP scores. The CGP reading score accounted for the most variance (43 percent). When the Letter Groups score was included, adding another 9 percent, over half of the variance was accounted for (52 percent). The next three variables in order were the Health Occupational Interest Score, the Mosaic Comparison Score, and the Year 2000 score, each contributing approximately one percent more. The Sentences and Math scores were of negligible further influence in accounting for more variance, each contributing less than one percent.

Another stepwise regression analysis combined certain process variables, such as Grade Point Averages and number of repeated required courses, with the seven CGP variables, to predict the criterion variable of number of SBE's passed. This linear combination accounted for 69 percent of the variance in the criterion variable.

This improvement of 13 percentage points in the "R^2" left less than a third of the variance unaccounted for. The variable accounting for the most variance was still the CGP Reading score (43 percent) followed by the CGP Letter Groups Score (9 percent). Three grade point average measures followed with cumulative grade point average adding 2 percent, science grade point average 7 percent, and nursing grade point average 3 percent.

When student characteristics were added to the list of independent variables, the resulting linear combination accounted for 80 percent of the variance in number of SBE's passed. The CGP Reading Score was still the single variable accounting for the greatest amount of variance.

Stepwise multiple regression analyses were also performed for each of the SBE scores. The linear combination of CGP socres accounted for between 40 percent and 52 percent of the variance in the individual SBE scores. The Reading test score was the single variable associated with the most variance in all but the Obstetrics board score, where the Year 2000 test score replaced it. Additional tests adding between 5 and 7 percent to the explained variance were the Mosaic Composition test for the Medical and Psychiatric Boards, the Year 2000 for the Surgical Board, and the Reading Score for the Obstetrics Board. When grade point average and the repeated course indicators were included, the amount of variance explained by the resulting linear combination was increased to around two-thirds of the variance for each SBE score, with the cumulative grade point average accounting for around half of the variance (ranging from 48 percent on the Psychiatric Board to 62 percent on the Surgical Board). The addition of student characteristics variables to the linear equation decreased unexplained variances to around 25 percent or less for all but the Obstetrics Board.

Discussion

The criterion to be evaluated was the score of 50 (the midpoint of the admissions tests range) as a reasonable standard of moderate ability. This would qualify an aspirant for eligibility in a pool of candidates from whom individuals would be randomly drawn for admission. Collateral research and a regression analysis of College data contribute evidence that the CGP tests do bear a relationship to State Board results. Raising the current qualification standards to 50 and broadening the eligibility requirement to all tests in the battery is a reasonable way of improving collective performance in the State Boards. The rationale is that more capable students, given the same methods and quality of instruction, will score higher and thus pass the State Boards more frequently. Higher pass rates is a foreseeable consequence.

This procedure is not represented as the *only* way to achieve higher pass rates. It is *one way* which has been proposed, and subjected to scrutiny on the basis of the data. Other ways of achieving the same result could be proposed, and should be evaluated on their own merits.

The data do not decide the eligibility standards. Responsible people informed by the data, by their experience and other evidence, and by their discussions with each other, make the decisions. The present study makes a contribution to conflict resolution, where many pathways are possible, by shedding light on available evidence.

Perhaps the most useful model for evaluating admissions criteria is the total cost model. The utilities and the costs of the proposed decision would be weighed in terms of probable outcomes. Costs in this context refer not only to dollar costs, but to all those stresses, efforts, and limitations of further path that derive from any decision. What is the total cost of the proposed eligibility criteria? If the benefits and likely outcomes justify the costs, the policy can be said to be a reasonable one.

Paul Larkin, Director
Institutional Research

7/26/77

Table 1

PRINCE GEORGE'S COMMUNITY COLLEGE

Relationship between Selected Predictors and Six Criteria of State Board Exam Success

	Criteria of State Board Exam Success					
	Total No. of SBE passed	Medical Board Score	Surgical Board Score	Childrens Board Score	Psychiatric Board Score	Obstetric Board Score
I. CGP Information						
Reading	.66***	.50***	.61***	.58***	.65***	.50***
Letter groups	.59***	.42**	.34*	.21	.38**	.30*
Sentences	.57***	.44**	.47***	.43**	.54***	.41**
Mosaic Comparison	.53***	.47***	.50***	.40**	.53***	.50***
Year 2000	.44**	.52***	.55***	.42**	.51***	.52***
Math	.18	.07	.23	.09	.11	.11
Health Occupat'l. Int.	.16	.12	.13	.14	.15	.18
II. Process Information						
Cum. GPA	.47***	.70***	.79***	.70***	.70***	.72***
Nursing GPA	.36**	.67***	.73***	.63***	.65***	.70***
Science GPA	.30*	.60***	.69***	.58***	.60***	.63***
Number of Nursing repeats	-.20	-.25	-.22	-.13	-.13	-.12
Number of Science repeats	-.10	-.08	-.29*	-.19	-.24	-.14
III. Characteristics of Graduates						
Race	.59***	.30*	.54***	.39**	.34*	.29*
Year of Birth	.30*	-.12	-.06	-.17	-.16	-.18
Semester Graduated	.14	.21	.09	.35*	.31*	.29*
Sex	.11	.13	.11	.02	.10	.07

*** P = .001
** P = .01
* P = .05

7/22/77

DEPENDENT VARIABLE.. SBEPASS NUMBER OF SBE PASSED

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CGPREAD	CGP READING SCORE	.65653	.43104	.43104	.65653
LETRGRP	LETTER GROUPS SCORE	.72223	.52162	.09058	.59012
CUMGPA		.73674	.54279	.02117	.47144
SCIGPA		.78494	.61612	.07333	.29376
NURSGPA		.80141	.64226	.02613	.36118
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.80946	.65523	.01297	.16076
MOSCOMP	MOSAIC COMPARISON SCORE	.81313	.66118	.00595	.53342
YR2000	YEAR 2000 SCORE	.81939	.67141	.01023	.44004
CGPSENT	CGP SENTENCES SCORE	.82159	.67501	.00360	.56826
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.82400	.67897	.00397	-.19891
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.82835	.68616	.00719	-.10009
CGPMATH	CGP MATH SCORE	.82917	.68752	.00136	.17648
(CONSTANT)					

SOURCE: Institutional Research Office.

Table 3

DEPENDENT VARIABLE.. BOARDS SURGICAL BOARD

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CUMGPA		.78829	.62139	.62139	.78829
MOSCOMP	MOSAIC COMPARISON SCORE	.82979	.68856	.06716	.49760
CGPREAD	CGP READING SCORE	.84633	.71628	.02772	.61209
LETRGRP	LETTER GROUPS SCORE	.85446	.73010	.01382	.34256
CGPMATH	CGP MATH SCORE	.85762	.73551	.00541	.22798
CGPSENT	CGP SENTENCES SCORE	.85996	.73781	.00230	.46599
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.86006	.73970	.00190	-.21916
NURSGPA		.86075	.74089	.00119	.73413
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.86110	.74149	.00060	-.28930
SCIGPA		.86144	.74208	.00059	.68995
YR2000	YEAR 2000 SCORE	.86159	.74234	.00026	.54791
(CONSTANT)					

SOURCE: Institutional Research Office.

DEPENDENT VARIABLE.. BOARDM MEDICAL BOARD

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CUMGPA		.70089	.49125	.49125	.70089
CGPREAD	CGP READING SCORE	.75675	.57267	.08142	.59829
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.77748	.60447	.03180	-.07721
MOSCOMP	MOSAIC COMPARISON SCORE	.79283	.62857	.02410	.46810
CGPSENT	CGP SENTENCES SCORE	.79772	.63635	.00778	.44053
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.80212	.64339	.00704	-.25242
NURSGPA		.80509	.64817	.00478	.67202
CGPMATH	CGP MATH SCORE	.80856	.65377	.00560	.06851
YR2000	YEAR 2000 SCORE	.80923	.65485	.00108	.51518
SCIGPA		.81006	.65619	.00134	.60197
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.81027	.65653	.00034	.11551
LETRGRP	LETTER GROUPS SCORE	.81034	.65665	.00012	.41602
(CONSTANT)					

SOURCE: Institutional Research Office.

Table 5

DEPENDENT VARIABLE.. BOARDC CHILDRENS BOARD

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CUMGPA		.70412	.49578	.49578	.70412
CGPREAD	CGP READING SCORE	.75165	.56498	.06920	.58062
LETRGRP	LETTER GROUPS SCORE	.76262	.58159	.01661	.20691
MOSCOMP	MOSAIC COMPARISON SCORE	.78790	.62079	.03919	.39642
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.79651	.63443	.01364	-.13079
SCIGPA		.79995	.63991	.00548	.58415
YR2000	YEAR 2000 SCORE	.80206	.64329	.00338	.41677
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.80350	.64561	.00231	-.19199
CGPMATH	CGP MATH SCORE	.80396	.64635	.00075	.09345
NURSGPA		.80424	.64680	.00045	.62954
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.80446	.64716	.00036	.13852
CGPSENT	CGP SENTENCES SCORE	.80453	.64727	.00011	.42996
(CONSTANT)					

SOURCE: Institutional Research Office.

Table 6

DEPENDENT VARIABLE.. BOARDP PSYCHIATRIC BCARD

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CUMGPA		.69531	.48346	.48346	.69531
CGPREAD	CGP READING SCORE	.77525	.60101	.11755	.64525
MOSCOMP	MOSAIC COMPARISON SCORE	.80432	.64693	.04592	.53125
LETRGRP	LETTER GROUPS SCORE	.81005	.65618	.00925	.38469
CGPMATH	CGP MATH SCORE	.81404	.66266	.00648	.10661
YR2000	YEAR 2000 SCORE	.81580	.66552	.00286	.51285
NURSGPA		.81723	.66786	.00234	.65057
CGPSENT	CGP SENTENCES SCORE	.81846	.66988	.00202	.54496
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.81916	.67102	.00114	.15386
SCIGPA		.81978	.67204	.00102	.60224
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.81993	.67229	.00025	-.21988
(CONSTANT)					

SOURCE: Institutional Research Office.

Table 7

DEPENDENT VARIABLE.. BOARDQ OBSTETRICS BCARD

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CUMGPA		.71891	.51683	.51683	.71891
MOSCOMP	MOSAIC COMPARISON SCORE	.77337	.59811	.08128	.49999
LETRGRP	LETTER GROUPS SCORE	.78351	.61389	.01579	.29565
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.79186	.62704	.01314	-.11820
CGPREAD	CGP READING SCORE	.79958	.63933	.01229	.50279
NURSGPA		.80537	.64862	.00929	.69650
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.80852	.65371	.00509	.17818
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.81210	.65950	.00579	-.14061
CGPMATH	CGP MATH SCORE	.81366	.66204	.00254	.11012
CGPSENT	CGP SENTENCES SCORE	.81490	.66406	.00202	.40980
YR2000	YEAR 2000 SCORE	.81616	.66612	.00205	.51889
SCIGPA		.81657	.66679	.00067	.63186
(CONSTANT)					

SOURCE: Institutional Research Office.

Table 8

DEPENDENT VARIABLE.. CUMGPA

SUMMARY TABLE

VARIABLE		MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R
CGPREAD	CGP READING SCORE	.50136	.25136	.25136	.50136
YRBIRTH	YEAR OF BIRTH	.57945	.33576	.08440	-.25147
YR2000	YEAR 2000 SCORE	.64753	.41929	.08353	.47890
NUREPEAT	NUMBER OF REPEATED NURSING COURSES	.67306	.45300	.03371	-.31073
LETRGRP	LETTER GROUPS SCORE	.68078	.46346	.01046	.29971
SEMGRAD	SEMESTER GRADUATED	.68544	.46983	.00637	.16220
BLACK	BLACK RACE	.69187	.47868	.00885	-.27254
CGPMATH	CGP MATH SCORE	.69408	.48175	.00306	.07945
SEX		.69508	.48313	.00138	.01150
HLTHINT	HEALTH OCCUPATION INTEREST SCORE	.69550	.48373	.00060	.12963
SCREPEAT	NUMBER OF REPEATED SCIENCE COURSES	.69572	.48403	.00030	-.27073
CGPSENT	CGP SENTENCES SCORE	.69591	.48429	.00026	.41814
(CONSTANT)					

SOURCE: Institutional Research Office.

Technical Note

The following is a comparison of the population studied (n=51, complete data on file) with the profile of graduates in the year of reference (n-159):

	Means or Percentages, Study Group	Means or Percentages, Graduate Profile
Age	30	29
White Race	86%	80%
Black Race	12%	16%
Other Race	2%	4%
Cum. G.P.A.	2.8	2.9
Sci. G.P.A.	2.4	2.5
Board M	481	499
Board S	495	512
Board C	486	498
Board P	502	519
Board O	475	503
SBE's Passed	4.5	4.5

7/26/77