

# PREDICTORS OF ACADEMIC PERFORMANCE OF NURSING STUDENTS AT A UNIVERSITY IN THE WESTERN CAPE, SOUTH AFRICA

Daniels, FM and Mthimunye, KDT: School of Nursing, University of the Western Cape

**INTRODUCTION:** Institutions offering Bachelor of Nursing programmes worldwide are under increasing pressure to graduate larger numbers of students to meet the demands of diminishing nurse workforce. Several studies have been conducted to identify predictors of academic performance. Academic performance and ultimately the retention of nursing students is known to be based on the interaction of student profile characteristics, student affective factors, academic and environmental factors, academic and psychological outcomes and professional integration factors.

Many second year students at the School of Nursing under study experience difficulty in the Bachelor of Nursing programme.

It was however not known whether specific predictor variables could predict students' performance in year two of the programme.

**AIM:** To examine the relationship between demographic and academic achievements and the academic performance of second-year nursing

**METHODS:** A non-experimental quantitative research approach with a cross-sectional predictive design was applied. The selected sample ( $n=226$ ) included all first-time enrolled second year Bachelor of Nursing students for the years 2012 – 2013 at the University of the Western Cape. An all-inclusive sampling method was applied. Data were obtained from the Student Administrative System Integrated (SASI) and recorded in the data collection check list. Statistical Package for Social Sciences software version 23.0 was used sort and analyse the data. Descriptive and inferential statistics were generated from the data.

**ETHICS:** Approval obtained from University Ethics Committee and the University's Registrar.

**CONCLUSION:** The study found that the cognitive predictor variables had the strongest predictive power of student performance in comparison to the non-cognitive predictor variables. Admission points and the NBT test are therefore important admission criteria for the Bachelor of Nursing programme.

## REFERENCES:

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## RESULTS

### A. DESCRIPTIVE ANALYSIS: Cognitive (C) and non-cognitive variables (NC)

- **Age at admission (NC):** Ranged between 17 and 30 years; mean of 19.5 years (1.4 SD).
- **Gender (NC):** Female students 83.19% ( $n = 188$ ); males 16.81% ( $n = 38$ ).
- **Race (NC):** Black students ( $n=120$ ; 53.10%); Coloured ( $n=80$ ; 35.40%); Indian ( $n=2$ ; 0.88%); White students ( $n=23$ ; 10.18%); "Other" (1; 0.44%).
- **English home language (NC):** 26.99% ( $n=61$ ). Other languages 73.01% ( $n=165$ ).
- **Place of residence (NC):** Reside outside campus 89.82% ( $n=203$ ); resided at a university residence (10.18%;  $n=23$ ).
- **Admission point (C):** Ranged between 29 and 58 points; mean of 37.8 (SD: 5.2). University admission point is set at 27 points.
- **National Bench marking Test (NBT) (C):** Ranged between 28.33 and 65; mean score of 43.40 (SD: 8.38).
- **Outcome variable - Second-year nursing grade (C):** Ranged between 48.5% and 90%; mean of 65.6% (SD 8.2).

### B. CORRELATIONAL ANALYSIS

- **Significant positive** Pearson  $r$  correlations between:
  - Grade for second-year nursing modules and admission points (0.437,  $p < 0.01$ )
  - Grade for second-year nursing modules and NBT (0.383,  $p < 0.01$ ).
- **Significant negative** Pearson  $r$  correlation between:
  - Grade for second-year nursing modules and ethnicity (-0.411,  $p < 0.01$ ).
- **Weak** Pearson  $r$  correlations ( $< 0.25$  or  $> -0.25$ ) between the following variables and grade for second-year nursing modules:
  - ESL (0.229); Gender (0.136); Place of residence (-0.018,); Age (-0.022).

### C. REGRESSION ANALYSIS

- NBT is an insignificant ( $p > 0.691$ ) predictor of performance in nursing second year nursing modules.
- Race and admission points are significant predictors ( $p < 0.000$ ) of performance in nursing modules.
- Race and admission points explained 24% ( $_{adj}R^2 = 0.24$ ) of the variances in the nursing modules grade distributions.