Predictors of Student Success Among Mexican- American and Non-Hispanic White Baccalaureate Nursing Students

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Introduction

- Inevitable increase in the demand for registered nurses in the United States.
- Measures are needed to increase student retention and reduce attrition in baccalaureate nursing programs.
- Impact of entrance GPA, financial aid, and student's perception of faculty caring are unknown.
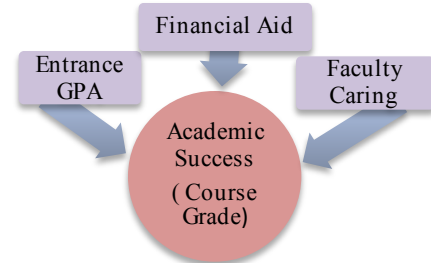
Purpose

To determine whether student success can be predicted by entrance GPA, financial aid and student's perception of faculty caring.

Sample

- $n = 142$ BSN students from seven universities across Texas.

Theoretical Model

Methods

- Secondary data analysis from an original dataset by Torregosa (2011).
- Entrance GPA measured as a continuous variable (0 through 4).
- Financial aid measured as a nominal variable (1 = yes, 0 = no).
- Student's perception of faculty caring measured as a continuous variable.
- Nursing Students' Perceptions of Instructor Caring (NSPIC) by Wade and Casper (2006) was used to measure student's perception of faculty caring.
- The total score of the NSPIC was obtained and served as a measure for student's perception of faculty caring.
- Student success measured as a continuous variable; numerical course grade for Medical-Surgical 1 (0 through 100).
- Descriptive statistics, Pearson correlation, and multiple linear regression were used to analyze the data.

Result

- Student success was predicted by entrance GPA (ß = 10.44, $p < .001$), receipt of financial aid (ß = - 4.89, $p < .001$), and student's perceptions of faculty caring (ß = 0.048, $p < .05$).
- R^2 is 0.342.

Table 1: Descriptive Statistics

Descriptive Statistics (N=132)

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Numerical grade	133	62	100	83.73	7.948
Entrance GPA	142	2.5	4	3.4944	0.35205
Financial Aid (1=yes; 0=no)	142	0	1	0.77	0.419
Faculty Caring	141	51	186	153.2624	24.02488

Table 2: Pearson Correlation

Predictors	Numerical grade	Entrance GPA	Financial aid	Faculty caring
Numerical grade	1			
Entrance GPA	.495**	1		
Financial aid (1=yes; 0=no)	-.325**	-0.071	1	
Faculty caring	0.154	-0.035	-0.082	1

** Correlation is significant at the 0.01 level (2-tailed).

Table 3: Multiple Linear Regression

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	43.814	6.974		6.282	0
Entrance GPA	10.443	1.587	0.474	6.58	0
Financial aid (1=yes; 0=no)	-4.892	1.34	-0.264	-3.652	0
Faculty caring	0.048	0.023	0.151	2.094	0.038

Conclusion

- Student academic success was significantly predicted by entrance GPA, financial aid, and perception of faculty caring.
- The findings of this study suggest that: entrance GPA is a good indicator of students' past academic achievement and their likelihood to be successful in a nursing major. Students who have a positive and caring relationship with nursing faculty are more likely to reach academic success in a nursing major. Experiences of financial struggles negatively affect student success.