

PREDICTING ACADEMIC PERFORMANCE AND DESERTION IN FIRST YEAR MEDICAL STUDENTS

Pita, María, Corengia, Ángela, Primogero, Cecilia, Mesurado, Belén, Redelico, Francisco, Lull, Laura, Angel Centeno

Office of Institutional Evaluation, and Faculty of Biomedical Sciences, Austral University, Buenos Aires, Argentina

In our medical school, the dropout rate of freshmen is 20% and academic performance is frequently unsatisfactory. One of the reasons is the insufficient learning skills and knowledge achieved after high school. This implies a waste of economic resources and time, and a lot of frustration in students.

The objective of this study was to analyze the relationship of the students cognitive abilities with their academic performance and with attrition in the first year.

METHODS

To measure the cognitive abilities of our students we applied the Differential Aptitude Test (DAT) after they were admitted to medical and nursing school. DAT consists of eight subtests: abstract reasoning, verbal reasoning, speed and accuracy, spelling, language (grammar and punctuation), numerical ability (arithmetic), space relations and mechanical reasoning. It has been widely used worldwide and has been validated for our context.

The test was given to 367 medical and 67 nursing students.

RESULTS

Multiple regression models were used relating academic performance and DAT results for medical and nursing students. In relation to academic performance R^2 was 0.12 for medical students and 0.34 for nursing students. The Odds Ratio (performance with attrition) were 1.63 for medical students and 2.13 for nursing students (non significant).

CONCLUSION

This test only predicts a small amount of the total variance for academic success, low results obtained from R^2 , though Odds Ratios shows moderate relationship between academic performance and dropout rates for our students globally.

Other variables need to be identified to recognize students at academic risk to improve their academic performance and reduce the attrition rates.