The Relationship between Quantitative-based Admissions Criteria and Performance in a Drug Literature Evaluation Course.

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Objective: To evaluate whether students’ scores on quantitative-based admissions criteria are related to performance in a drug literature evaluation course. Methods: Students’ (n = 100) grades in required pre-pharmacy statistics and calculus courses as well as performance on the PCAT Quantitative Ability section were compared to performance in a first-professional year, integrated drug literature evaluation course, about 50% of which comprised basic and clinical biostatistics. Results: Although there was little variation in performance in the prerequisite statistics course (83% ‘As’), there appears to be a relationship between course performance and drug literature evaluation final course grades. No students who had a ‘B’ or lower in the prerequisite statistics earned an ‘A’ the drug literature evaluation course, while 18.1% of the students with a prerequisite statistics course grade of an ‘A’ earned an ‘A’ in the drug literature evaluation course (Fisher exact test two-sided p = 0.068). The relationship appears to be due primarily to performance on course exams and not group-based assessments. Although there was more variability in calculus grades, no significant relationship was noted between class performance and grades in calculus. Students earning ‘As’ in the drug literature evaluation course tended to have higher Quantitative Ability scores on the PCAT (p = 0.004), which is primarily explained by a positive correlation of these scores with exam performance (r = 0.22, p = 0.029). Implications: This analysis suggests that it may be possible to use admissions criteria to identify individuals who might experience difficulty with a drug literature evaluation course.

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