## **Abstract**

### Introduction

Schools of pharmacy around the United States utilize a number of criteria to decide if applicants are likely to demonstrate academic success, including standardized testing, grade point average analysis and interviewing. One additional factor that may also impact student success is prior work experience in the field of pharmacy.

### Methods

In this observational, retrospective, longitudinal study, the impact of work experience was analyzed among 75 first year pharmacy students at Southern Illinois University Edwardsville School of Pharmacy. This difference was analyzed both subjectively, via self-reported confidence on a 5-point Likert scale for various pharmacy practice skills, and objectively, via analysis of student performance on a performance-based assessment (PBA) within students' first semester of classwork. The survey was administered at the beginning of the student's year and also after the completion of the first assessment. The study was designed to test for a difference between summative mean scoring between work experience groups.

### Results

Students with prior work experience expressed higher levels of confidence at identifying medication-related problems (3.27 vs. 3.00), indentifying the legal requirements of a labeled prescription product (4.09 vs. 3.60) and communicating with patients about medication-related problems (2.91 vs. 2.20) before the PBA than students without prior work experience. After the PBA, the average confidence level for both groups increased at every surveyed domain For the PBA, the summative mean scoring for students with pharmacy work experience was higher in both part 1 (2.77, 95% CI 2.61-2.93) and part 2 (2.94, 95% CI 2.85-3.03) than for students without pharmacy work experience (2.67, 95% CI 2.29-3.05 and 2.11, 95% CI 1.51-2.71 respectively).

# **Conclusions**

Students with prior pharmacy work experience may be at an academic advantage over students without prior pharmacy work experience, as evidenced by statistically higher PBA 1 Part 2 scoring among students with prior pharmacy work experience.