

Evaluation of a formal pharmacotherapy preparation boot camp and the impact on exam performance

Chelsey Llayton, PharmD, BCACP; Eric Dierkes, PharmD, CTTS;
Michaela Davis, PharmD; Bradley Troyer, PharmD, BCCCP



OBJECTIVES

- This study aimed to learn about the perceptions of student pharmacists who attended a pharmacotherapy boot camp and compare their performance to the previous year when the boot camp was not offered.

BACKGROUND

- UC School of Pharmacy pharmacotherapy sequence consists of eight, 7-week courses for second (P2) and third-year (P3) pharmacy students with multiple-choice and case-based assessments.
- No literature was found regarding a boot camp prior to starting pharmacotherapy courses, but there is some literature supporting the use of boot camps in other areas to increase confidence and preparedness.¹⁻³
- Students often struggle to adapt studying techniques to be successful in pharmacotherapy courses.

METHODS

Pharmacotherapy coordinators collaboratively developed a boot camp that focused on study strategies and how to break down and answer case-based questions.

P2 and P3 pharmacy students were offered the two-hour pharmacotherapy boot camp the first day of class in Fall 2023.

After the first exams in each course, students were emailed an anonymous survey with questions about how the boot camp prepared them for the exam, the most helpful components, and if it should be offered again.

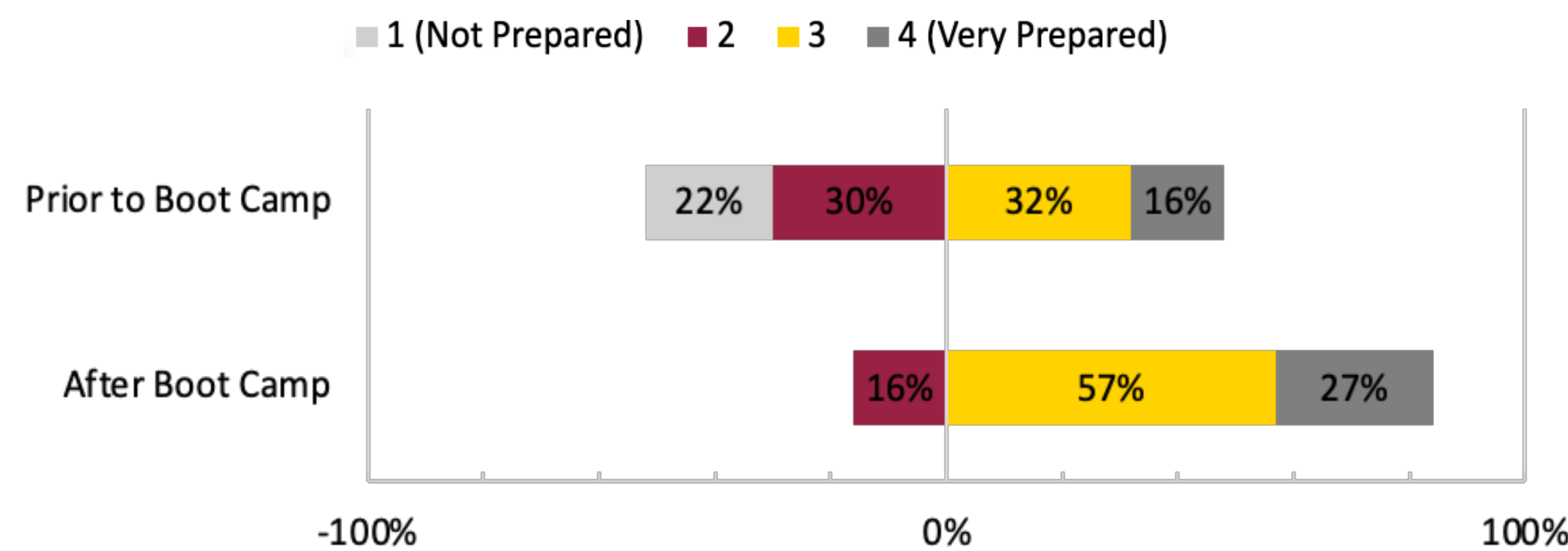
Aggregate data from the exams were compared to performance in Fall 2022 before the boot camp was offered.

RESULTS

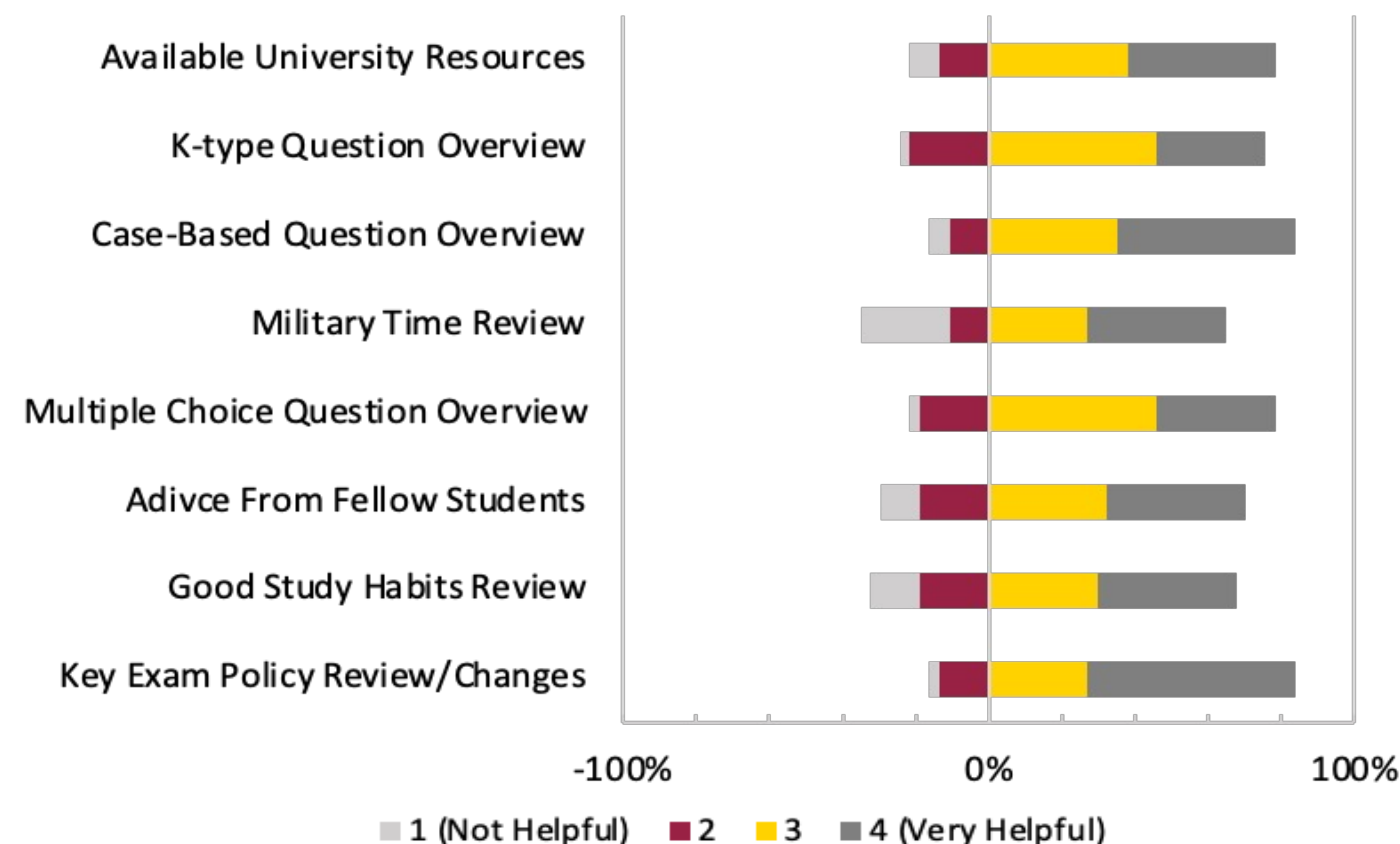
Demographics (N=37)

P2 Students	43%
Age > 26 Years Old	32%
English as a Second Language	27%

Student Preparedness For Pharmacotherapy

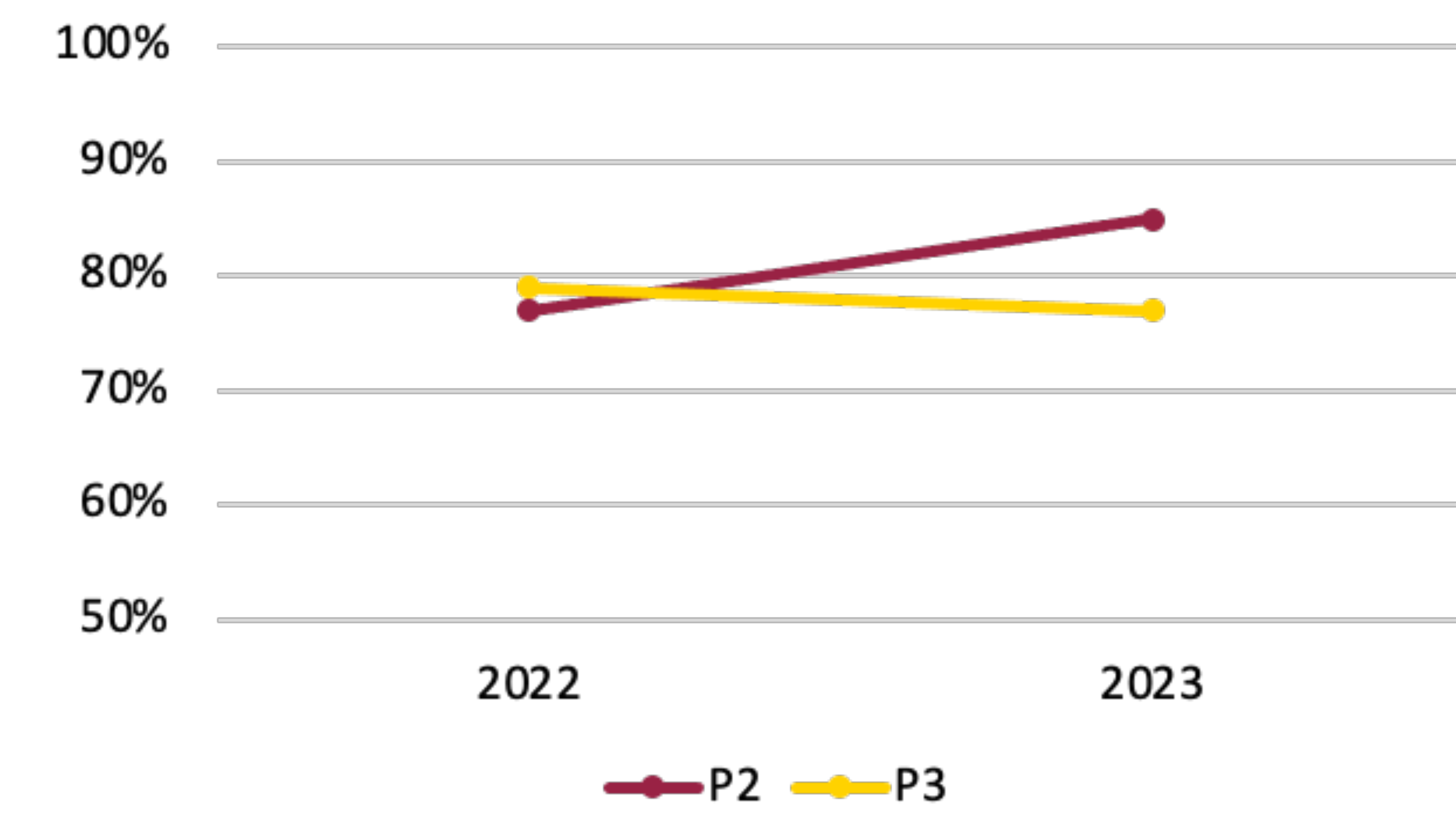


Helpfulness of Boot Camp Material

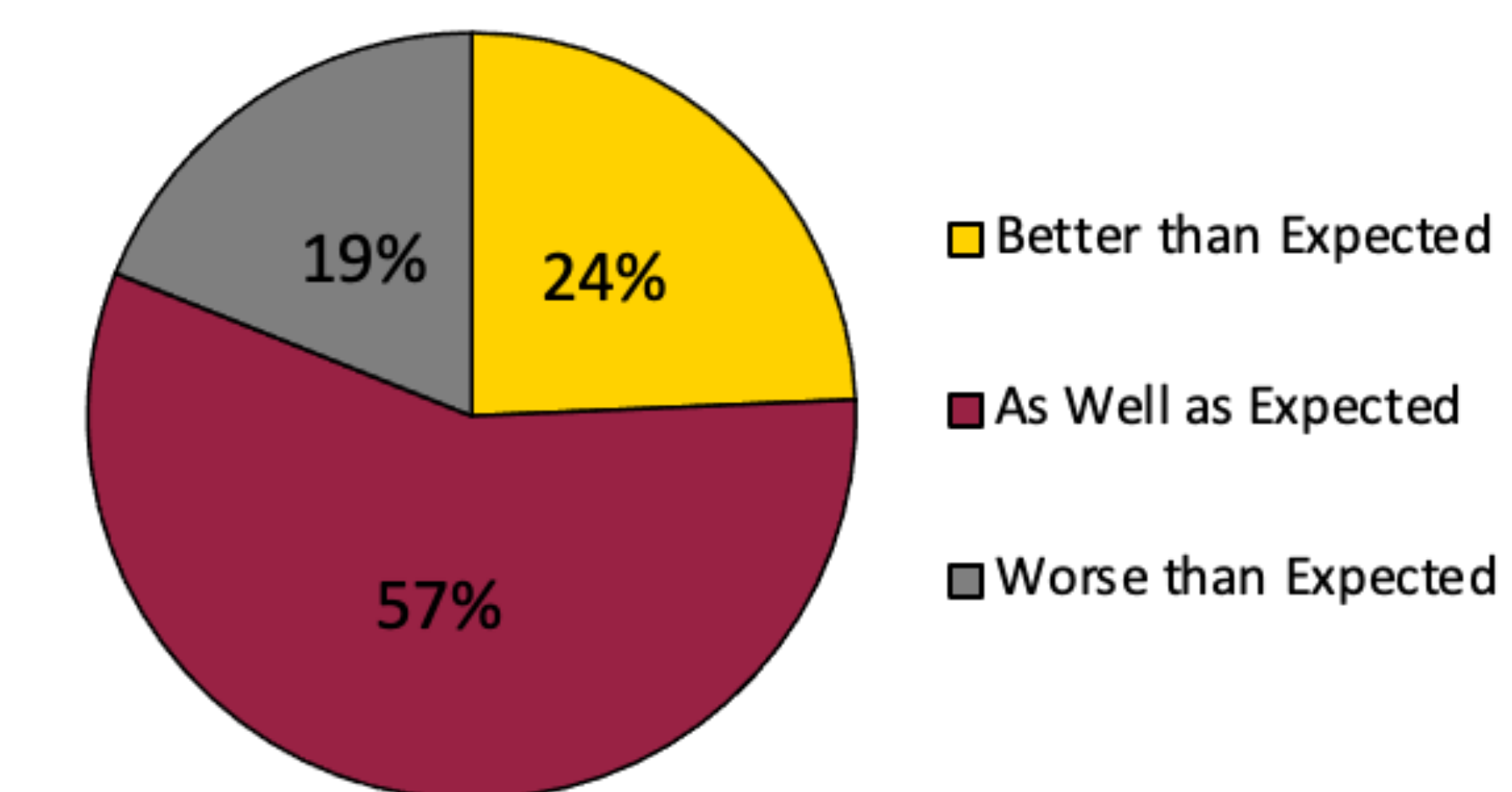


RESULTS CONT.

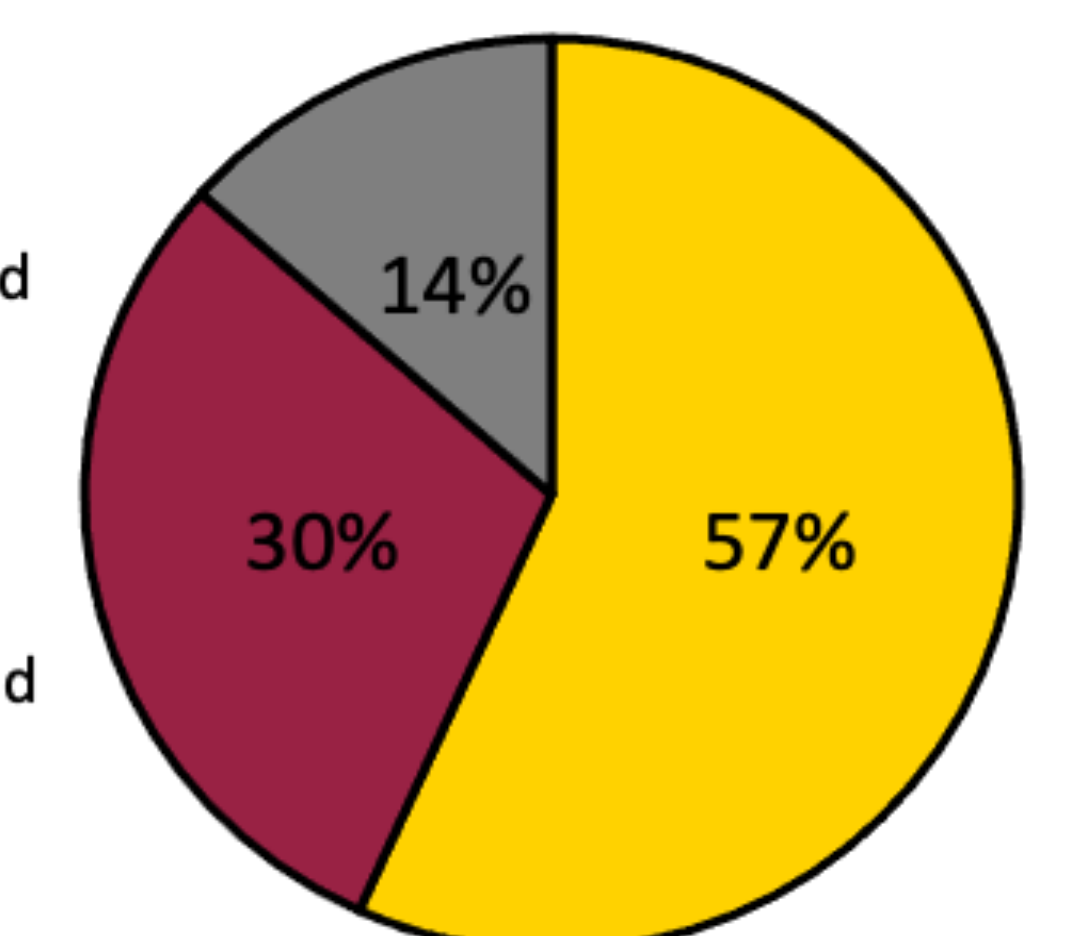
Exam 1 Average Scores



Student Identified Performance on First Multiple Choice Exam



Student Identified Performance on First Case-Based Exam



CONCLUSIONS

- The first multiple choice exam average scores increased for P2 students from 77% in 2022 to 85% in 2023, while average scores for P3 students dropped slightly from 79% to 77%. This suggests the P3 students did not find the session as meaningful having completed 4 pharmacotherapy courses prior to the boot camp, and P3 student comments support that.
- The review of common question types prepared the P2 students to know what to expect on the first exam. This familiarity with how the exam content would appear may have allowed the students to focus on the content instead of how the content will be assessed.
- Reflecting on the future, 86% of students recommended a boot camp be offered again next year. Due to the notable changes in exam scores and survey responses, the boot camp will continue to be offered to P2 students at the beginning of the pharmacotherapy sequence.

REFERENCES

- Ferguson MC, Timpe Behnen EM. Drug information boot camp for pharmacy residents. *Am J Health Syst Pharm.* 2015;72(14):1168-1170. doi:10.2146/ajhp140598
- Alnuhait M, Alharbi A, Alanizi A, et al. Implementing Oncology Pharmacy Boot Camp for Advanced Pharmacy Practice Experience Students at a Regional Conference in Saudi Arabia. *Cureus.* 2023;15(2):e34780. Published 2023 Feb 8. doi:10.7759/cureus.34780
- Bontempo LJ, Frayha N, Dittmar PC. The Internship Preparation Camp at the University of Maryland. *Postgrad Med J.* 2017;93(1095):8-14. doi:10.1136/postgradmedj-2015-133882