

Retrospective Analysis of APPE Failures Since 2020

Andrea Murzello, Pharm.D. Larkin University College of Pharmacy, Miami, FL
Melissa Gratz, Pharm.D., MBA Manchester University College of Pharmacy, Fort Wayne, IN
Nicole Gattas, Pharm.D. BCPS, FAPhA University of Health Sciences and Pharmacy in St. Louis, MO



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Background & Objective

- While failures on advanced pharmacy practice experiences (APPEs) are not common, they do occur.
- To have a more robust data set to review, three institutions collaborated to identify reasons for student APPE failure.
- Each institution has different APPE evaluations, however, students must pass critical areas to successfully pass the APPE, including knowledge, professionalism, and communication.
- Objective:** To describe the reasons students failed APPEs over a four-year period.
- Trends can assist faculty in identifying potential areas of growth or emphasis for pre-APPE curriculum. Early identification allows for early interventions, support, and potentially prevents APPE failures.

Methodology

Three colleges of pharmacy reviewed APPE evaluation records from four academic years, fall 2020 to spring 2024. For each student that failed an APPE, the critical area(s) for failure were documented based on the preceptor evaluation.

- Critical areas:** knowledge (K), professionalism (P), and communication (C).
- The students could fail the experience in one, two, or all three of the critical areas, and each was identified. The data from the three colleges was then collated to create a larger sample size to identify cross-sectional trends and included withdrawal data.

Results

- 1081 students were included in our study throughout the 4 academic years across all three colleges of pharmacy, including 40 failed APPEs.
- Knowledge is the most common critical area that is failed and was a factor for 72.5% of failed APPEs. Followed by professionalism at 55% and communication in 32.5% of cases. These percentages do not add up to 100% as students can fail one, two, or three critical areas.
 - Over all four years, almost half (19) failed just one critical area (knowledge OR communication OR professionalism). In contrast, 7.5% (3) of students failed all three critical areas. The remaining failed two areas each: 22.5% KP, 12.5% KC, and 10% PC. (Figure 1.)

Figure 1. Number of Each Combination of Critical Areas Students Failed Over Four Years

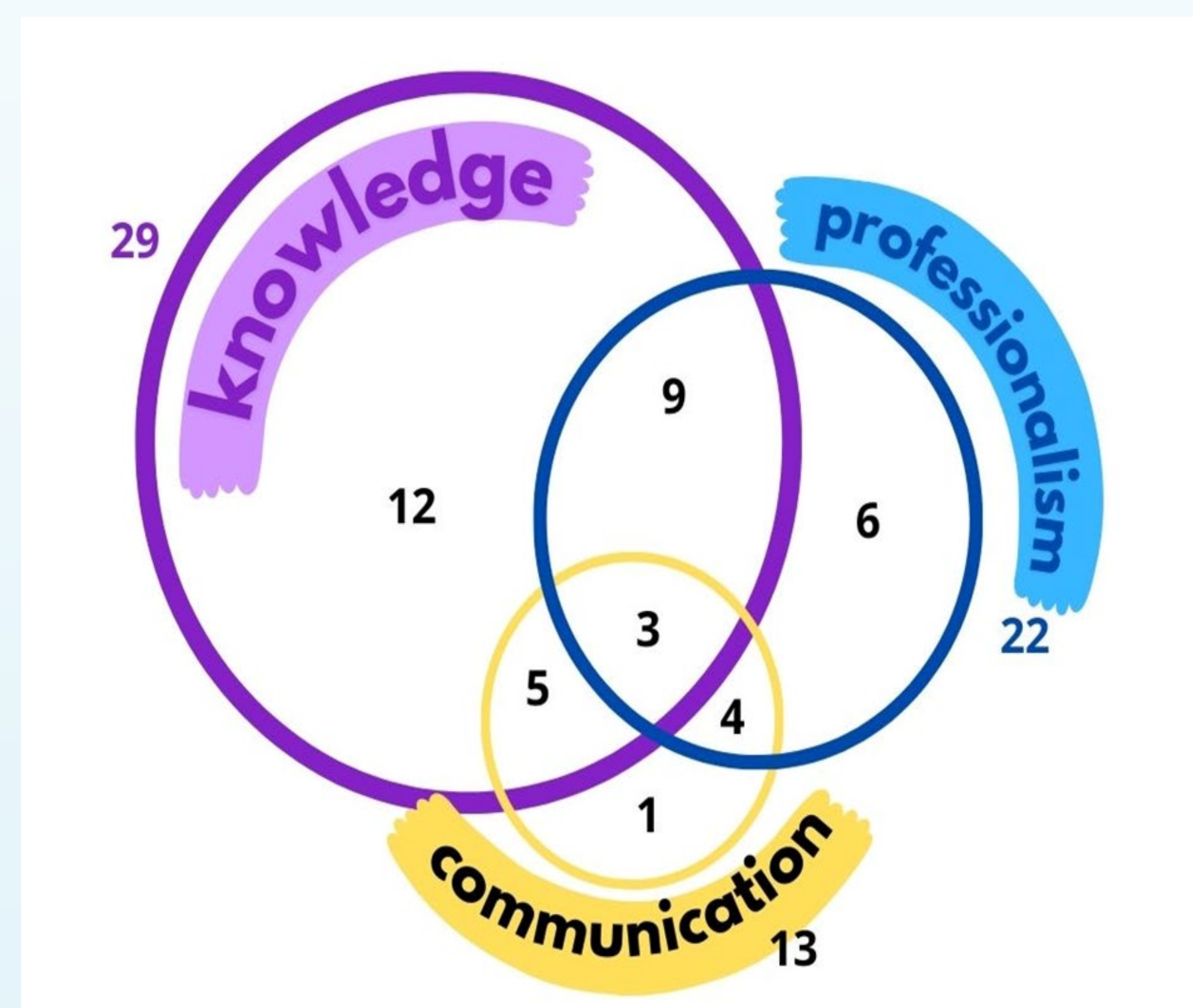
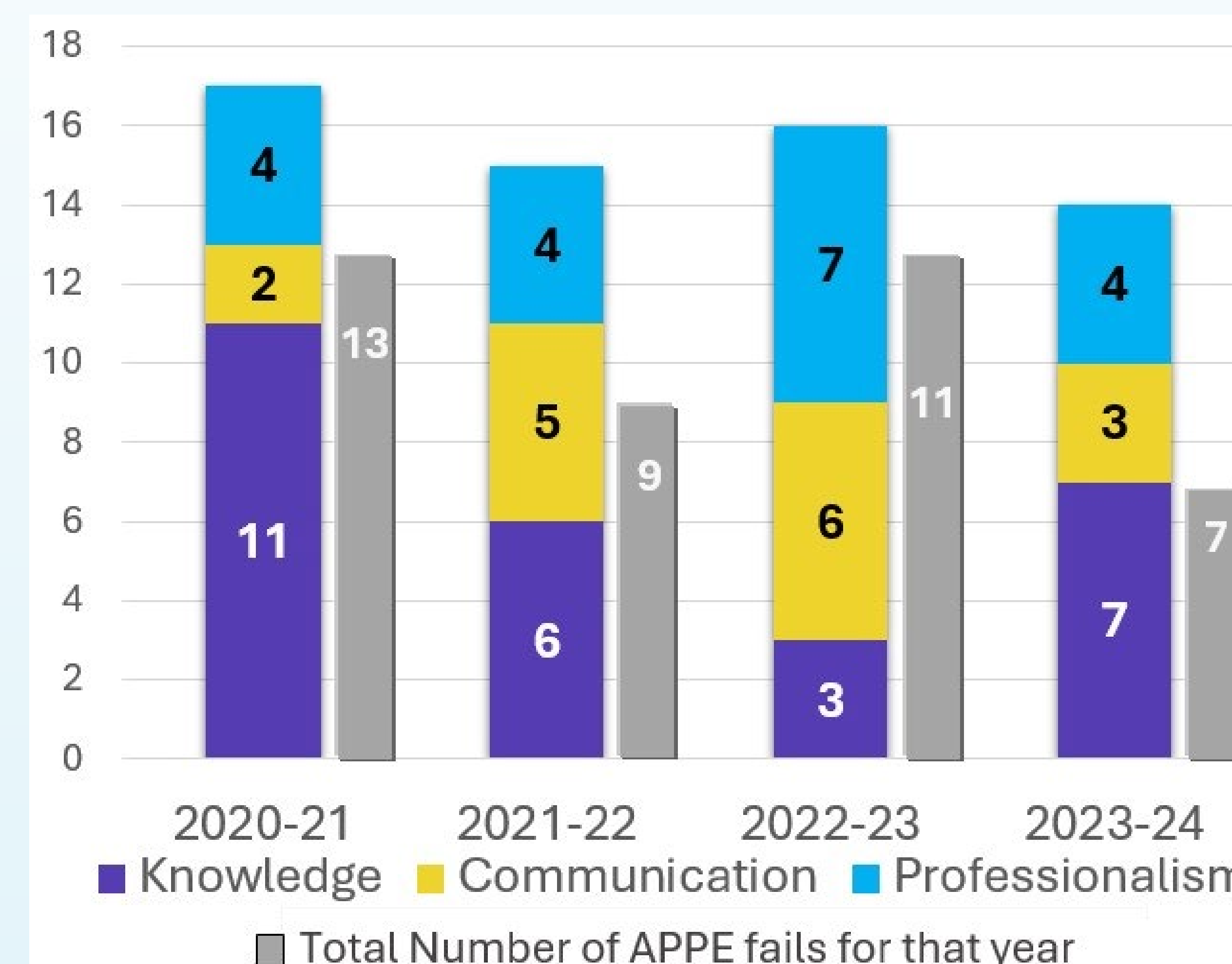


Figure 2. Failure of Critical Areas Over Time



Trends were not identified when comparing the data year-over-year. (Figure 2.)

- In 2020-2021, 3.8% of students failed an APPE, followed by 3.3%, 4.6%, and 3.2%. Failure of the knowledge domain peaked after COVID, at 3.2% (11/342), before decreasing and then bumping back up to the same level in 2023-24 (7/222).
- Communication had two lower years that bookended the four-year period and was the least common critical area for failures in three out of four years.
- Professionalism held steady at four APPEs (or in the one percentile) for three out of the four years.
- An additional 37 students withdrew from an APPE, or 2.9%, 4.3%, 4.6%, and 1.8% respectively each year. If withdrawals were not allowed, some of these APPEs would have been additional failures for a variety of reasons.

Discussion & Implications

Understanding reasons for APPE failure can assist colleges of pharmacy when determining: APPE orientation content, pre-APPE readiness criteria for the institution, additional curricular and co-curricular considerations, and preceptor development.

- Knowledge is essential and was the overall leading cause of failure in our study, but knowledge alone is not enough to pass a rotation.
- Many students who failed an APPE failed more than one critical area.
- Remediation should be specialized for each student based on the critical areas and preceptor feedback.