

Analysis of Pharmacist Patient Care Process Scores of Didactic Elective Courses and Their Impact on Pharmacy Student's Success on Advanced Pharmacy Practice Experiences

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Background

- Patient-centered care is becoming increasingly common in healthcare today, which is why it is incredibly important for students to be educated and tested for competency and understanding of its components.
- Few previous studies have been completed to assess pharmacy students' readiness for APPE (Advanced Pharmacy Practice Experience) rotations. However, there have not been any studies that focus on students' patient-centered care readiness specifically as it relates to these rotations.
- PPCP scoring assesses student's exposure to patient-centered care within their various elective courses while in pharmacy school

Objectives

- To assess the impact of a student's PPCP scoring on their success on APPE rotations as it relates to CAPE domain scores
- To identify if the higher the student's PPCP score the better the student outcomes (I.e., higher CAPE domain scores)

Methods

Study Design:

Retrospective, cross-sectional

Data Source:

•Student logs from the Office of Professional & Student Affairs (OPSA)

Study Population:

•Students from the SIUE School of Pharmacy classes of 2016, 2017 and 2018

Study Measures: Dependent Variable

•Student CAPE domain scores (patient-centered care & problem solving)

Study Measures: Independent Variable

- Student PPCP scores
- APPE type
- •Module number

Methods

Statistical Analysis

- Mixed-effects ordinal logistic regression was used to evaluate the students' overall PPCP scores and their two CAPE domain scores for patient-centered care & problem solving
- Data was controlled & adjusted for APPE type and module number as well
- All analyses were completed using data analysis functions accessible in Microsoft Excel

Results

Table 1: CAPE Domain (Patient-Centered Care)

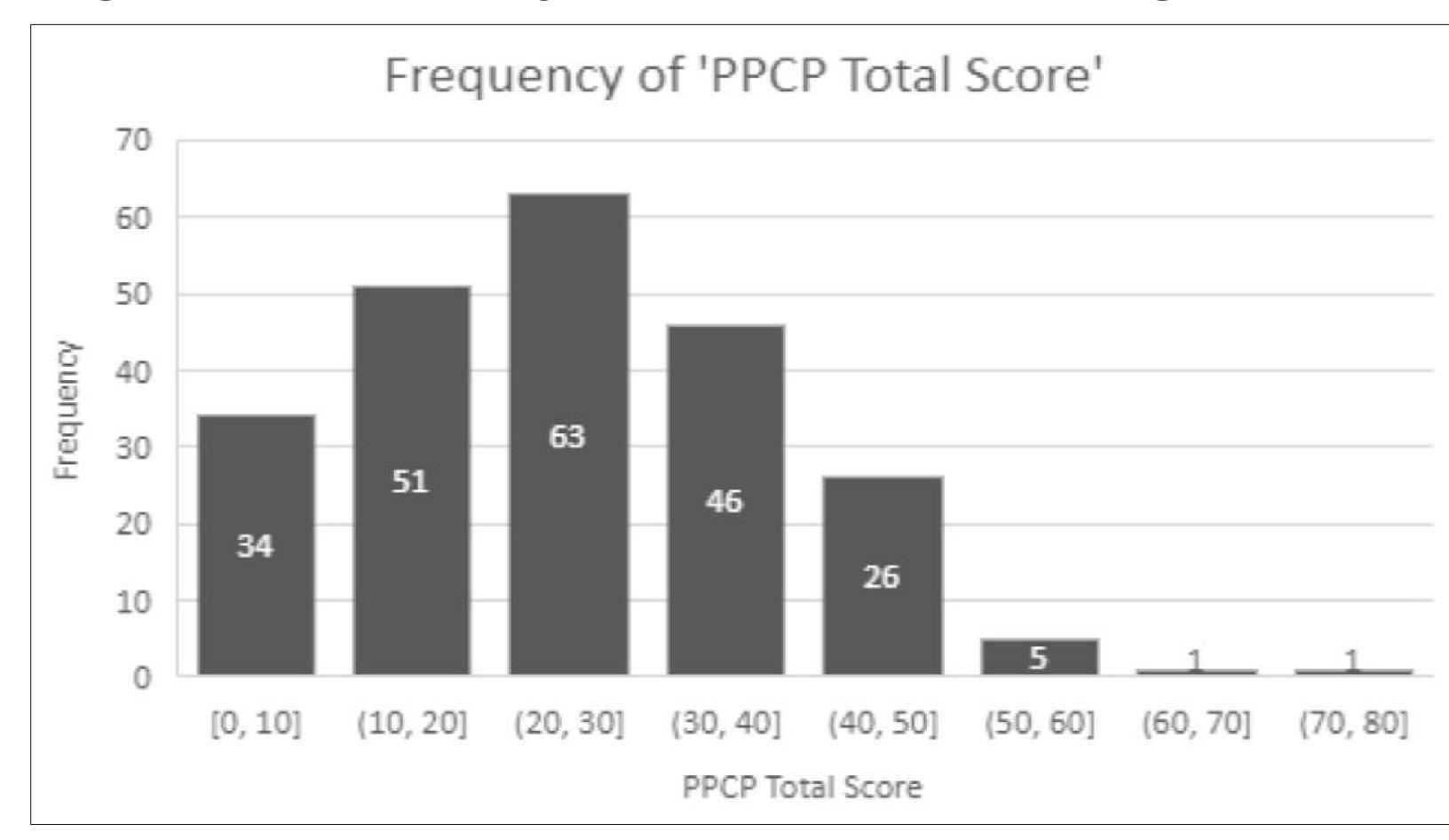
CAPE Domain: Patient-Centered Care	OR (95%CI) Adjusted	OR (95% CI) Unadjusted
PPCP Categories		
PPCP Score Median or Greater (≥ 28)	1.86 (1.25 to 2.77)	1.62 (1.17 to 2.25)
PPCP Score Less than the Median (< 28)	Reference	Reference
Module Number	1.25 (1.17 to 1.35)	1.18 (1.10 to 1.26)

Table 2: CAPE Domain (Problem Solving)

CAPE Domain: Problem Solving	OR (95%CI) Adjusted	OR (95% CI) Unadjusted
PPCP Categories		
PPCP Score Median or Greater (≥ 28)	1.75 (1.22 to 2.54)	1.61 (1.17 to 2.54)
PPCP Score Less than the Median (< 28)	Reference	Reference
Module Number	1.17 (1.09 to 1.25)	1.12 (1.06 to 1.19)

Results

Figure 1: Frequency of PPCP Scores Among Students



Limitations

- APPE rotations may occur at any time for students & do not have a set order in which they must occur
- Varying preceptors may have resulted in differing CAPE domain scores since some the volunteer base of preceptors is very widespread (Faculty vs. Non-faculty)
- Did not include the most recent student data (classes of 2019 & 2020)
- Some electives had changes in faculty members who teach them over the years, and could have led to discrepancies in the course syllabi
- PPCP Assessment tool is currently not being reproduced in other studies & has not been officially validated or published yet

Conclusion

- Results suggest that students who have PPCP scores at the median or greater (>28), the higher scores they will receive on their CAPE domains
- Electives that have high PPCP scores showed a statistically significant benefit towards increased CAPE domain scores in the four core APPE rotations among Southern Illinois University Edwardsville School of Pharmacy students.