

Comparison of online versus in-person delivery of a pharmacy law course for third year student pharmacists

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Background

- Pharmacy law courses are a required portion of the Doctor of Pharmacy curriculum
- Most states require pharmacists to pass a Multistate Pharmacy Jurisprudence Examination (MPJE) for licensure
- Technology allows for the adaptation of course content to an online environment
- Online courses provide an environment similar to professional experiences where pharmacists must engage in independent learning
- Similar outcomes must be ensured between online and in-person courses before schools can fully transition to online courses alone

Purpose

This project was designed to compare educational outcomes resulting from online and in-person law courses

Methods

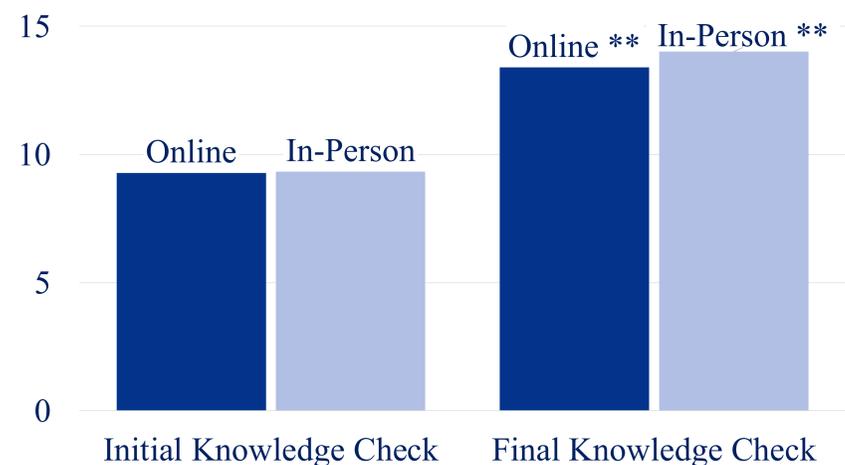
- Online pharmacy law course developed at Purdue University College of Pharmacy
- Offered parallel to an in-person course to third-year pharmacy students during the Spring 2019 semester
- Similarities:
 - Instructor, credit hours, and course text
 - Assignments, exams, and study aids
- Difference: Method of Delivery
 - Online: five optional learning modules
 - In-Person: two 50-minute lectures each week
- Identical assessments administered to both courses
 - Initial Knowledge Check
 - Final Knowledge Check
 - Mock Indiana MPJE
- Outcomes:
 - 1) Comparison of mean pre- and post- knowledge check scores
 - 2) Improvement in knowledge check scores
 - 3) Comparison of mock MPJE scores

Results

Similar Mean Knowledge Check Scores and Improvements in Score

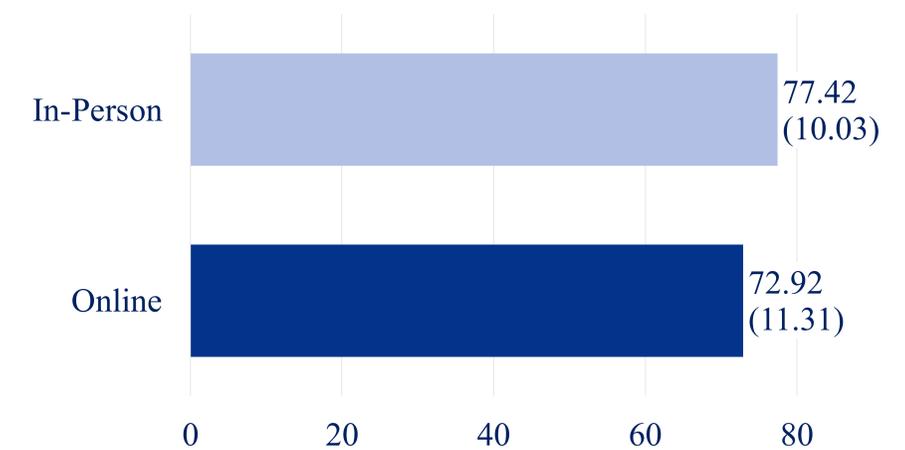
Course	Pre- Score (SD)	Post- Score (SD)	Improvement
Online (n = 26)	9.27 (2.11)	13.38 (2.21)	+ 4.12
In-Person (n = 107)	9.32 (1.96)	14.01 (2.63)	+ 4.69

Similar Mean Pre- and Post-Knowledge Check Scores



** statistically significant improvement in knowledge score (p-values < 0.001)

Similar Mock MPJE Scores (SD)



No statistically significant difference in mock MPJE score (p-value = 0.072)

Discussion

- No significant difference (p-value > 0.05) in:
 - Initial knowledge check scores
 - Final knowledge check scores
- No significant difference (p-value = 0.072) in mock MPJE scores
- **Indicates similar performance regardless of mode of delivery**
- Both courses resulted in statistically significant improvements (p-values < 0.001) in knowledge check scores

Conclusions

An online pharmacy law course was a viable and effective alternative to an in-person course. No differences were seen in course outcomes across different modes of content delivery at one institution. Doctor of Pharmacy programs could benefit from the implementation of online pharmacy law courses to maintain ACPE accreditation and still adequately prepare students for the MPJE and pharmacy licensure.

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