

Assessing the impact of using video application as a learning method for the Top 250 Drugs

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Introduction

- Learning about the top 250 drugs is a common segment in many pharmacy school's curriculum
- Memorization of the top 250 drugs are important for Advanced Pharmacy Practice Experiences and beyond
- Common ways of studying include Quizlet, flashcards, and repeatedly writing the information
- Many students struggle finding the best way to study and feel inadequately prepared for the drug quizzes
- Studies show immersive simulations have had an overwhelming amount of positive feedback from students

Objective

- Assess student confidence and knowledge with the top 250 drugs before and after the use of video application
- Assess how students feel about utilizing an online healthcare simulation compared to traditional study tools

Methods

Study Design

- 5 interactive videos were developed and made available during to third year pharmacy students.
- Pre- and post-survey were administered to students to assess drug knowledge, study methods, and usefulness of the review videos.
- Anonymous student responses to questions about time spent, confidence, and knowledge of the Top 250 Drugs
- Anonymous student responses to questions about the utilization and impact of using video application as a learning method for the top 250 Drugs

Study population

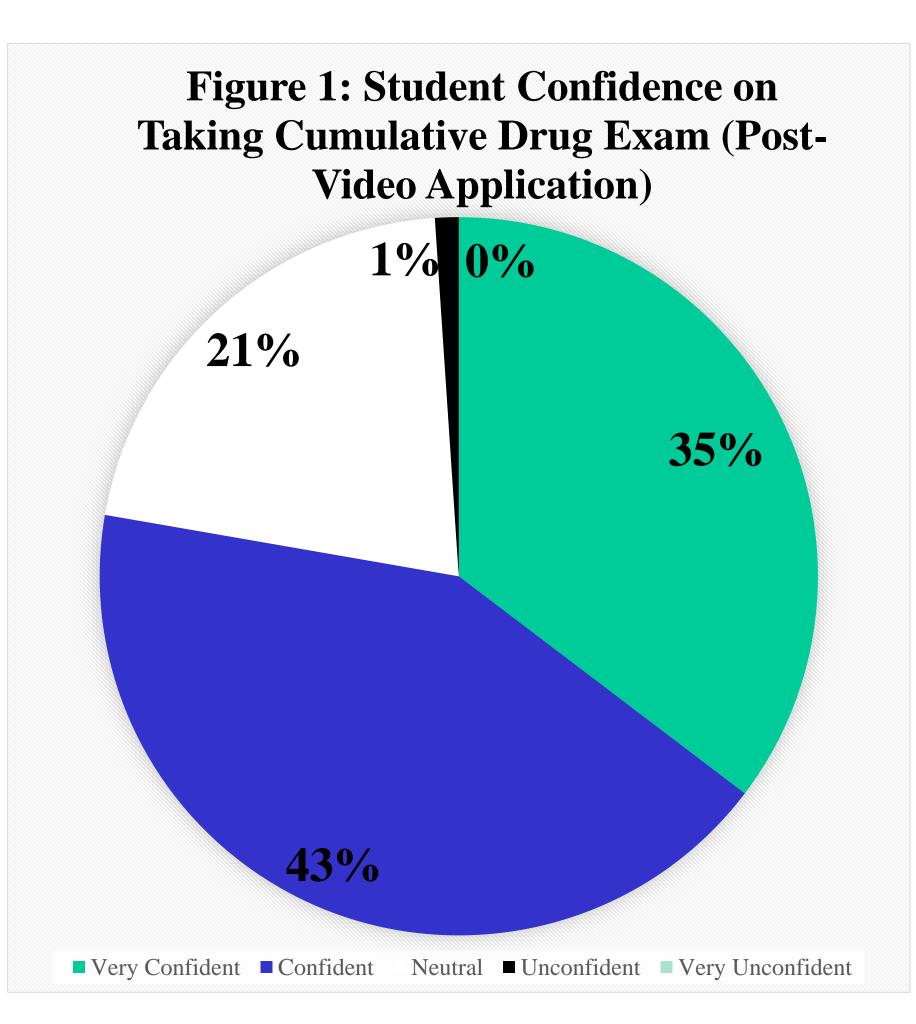
 Third year students enrolled in the Southern Illinois University of Edwardsville School of Pharmacy program

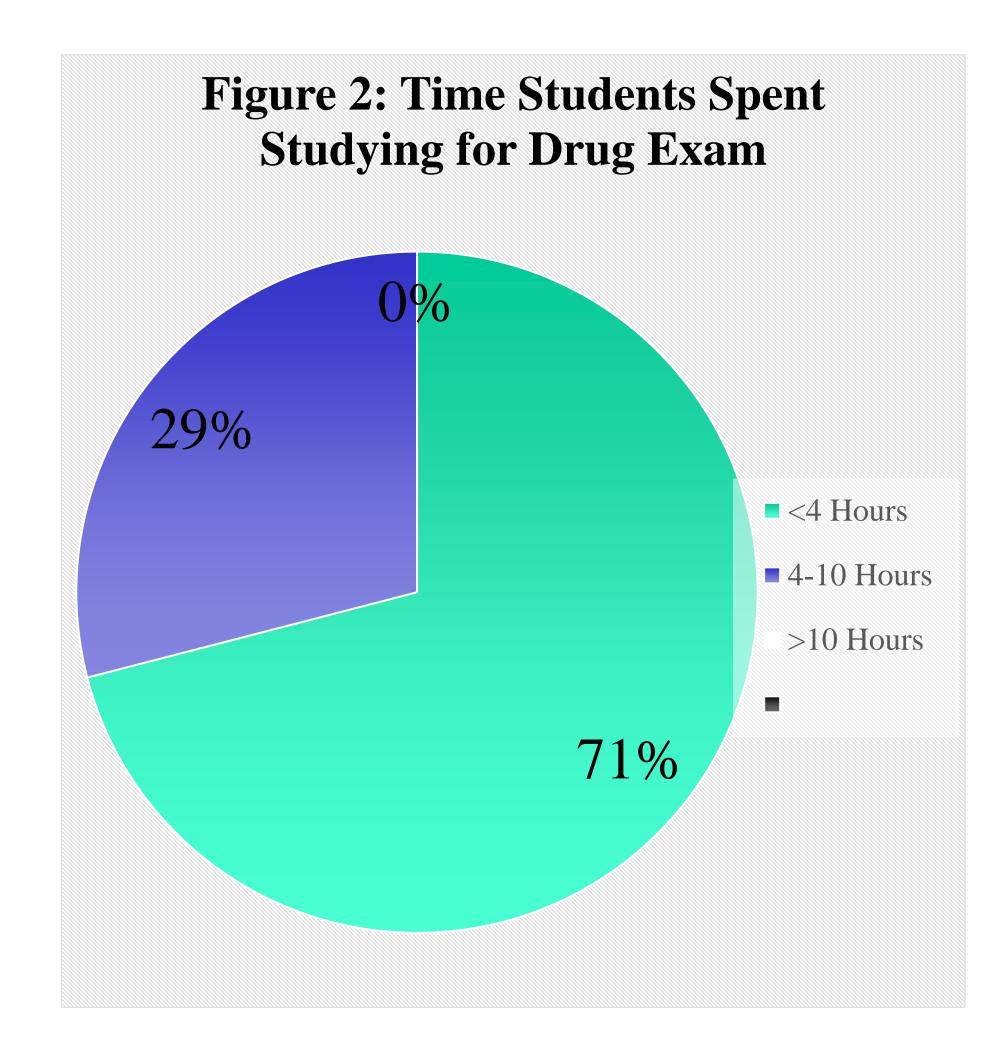
Study distribution

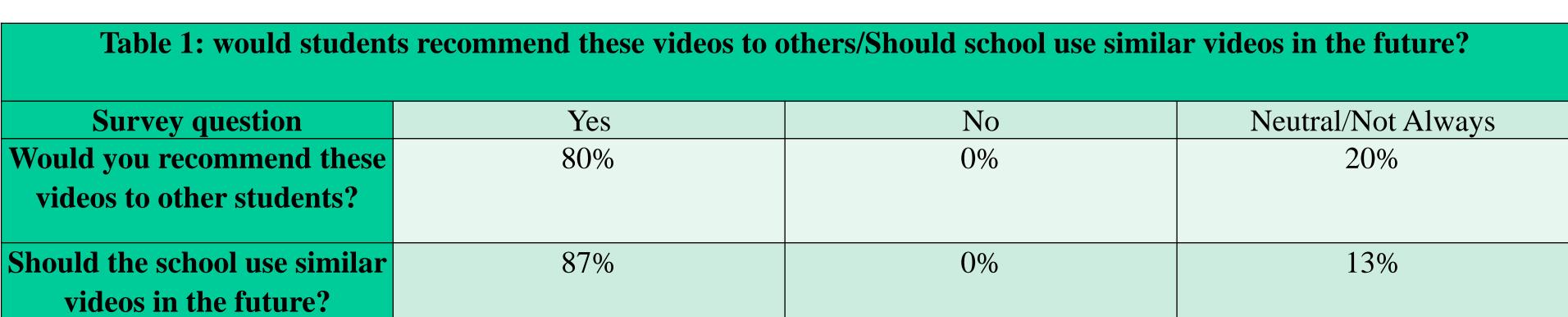
- Anonymous responses collected using SIUE Qualtrics survey platform
- Pre-survey was made available to students for ~7 months
- Post-survey was made available to students for ~1 month

This study underwent and received SIUE IRB approval under protocol #1749

Results







- Data for the pre-survey was collected from 54% of the third-year pharmacy students at SIUE, with 48% responding to the post-survey.
- 28.57% of students felt they had good or very good knowledge on the pre-survey, 74.19% felt they had good or very good knowledge on the post-survey
- 14.29% of students reported feeling confident or very confident about taking a drug quiz on the pre-survey, 70.97% felt confident or very confident after video on the post-survey
- 70.97% of students spent less than four hours studying for the cumulative drug exam, 29.03% spent four to ten hours studying.
- 22.58% of students said the video application increased their study time, 74.19% said it did not increase or neutrally affected their study time.
- 74.19% of students reported feeling satisfied with the videos, 25.81% felt neutral, with no students reporting dissatisfaction with the videos

Conclusion

- Using video application as a learning method for the top 250 drugs increases student confidence and knowledge
- Video application does not increase time spent studying for the exams, but does increase student perception of preparedness, this suggest it may be a more time efficient way for students to prepare for their top 250 drug quizzes and exam
- Student satisfaction level with the video application was high
- Many students would recommend the videos to their peers and are in favor of the school continuing the use of interactive videos in the future
- Future research will benefit from an expanded population size to further assess the impact of using video application as a learning tool for the top 250 drugs

Results Cont.

Table 2: Student Preparedness Level for Cumulative Top 250 Drug Quiz

Level of Preparedness	Pre-Survey	Post-Survey
1-2	11.43%	3.23%
3-4	37.14%	0%
5-6	42.86%	19.35%
7-8	8.57%	38.71%
9-10	0%	38.71%

References

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- 2. Caldas LM, Matulewicz AT, Koenig RA, Hindle M, Donohoe KL. *Using immersive simulation to engage student learners in a nonsterile compounding skills laboratory course*. Curr Pharm Teach Learn. 2020 Mar;12(3):313-319. doi: 10.1016/j.cptl.2019.12.016. Epub 2019 Dec 10. PMID: 32273069.
- 3. Caldas LM, Eukel HN, Matulewicz AT, Fernández EV, Donohoe KL. *Applying educational gaming success to a nonsterile compounding escape room*. Currents in pharmacy teaching & learning. 2019 Oct;11(10):1049-1054 doi: 10.1016/j.cptl.2019.06.012., PMID: 31685175