

Virtual Reality Learning Experience In Introductory Pharmacy Practice: Quasi-Experimental Study

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INTRODUCTION

Extended reality technologies (XR) is an umbrella term of simulated-based learning experience tools that covers 3-dimensional technologies including Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR). In King Saud University, first year pharmacy students are required to experience hospital observational training during the Introductory Pharmacy Practice Experience (IPPE).

OBJECTIVES

Our aim was to measure the effectiveness and satisfaction of VR learning experience among IPPE students at King Saud University, College of Pharmacy.

METHODS

Quasi-Experimental Study


ARMS	Experimental Arm Level 3 Students	Control Arm Level 5 Students
	Pre-knowledge Test and Self-Assessment	
INTERVENTION	VR Experiment	Hospital Visits
		
TEST	Post-Knowledge Test and Self-Assessment	
	Satisfaction Survey	



FIGURE (2): SELF-ASSESSMENT TEST RESULTS

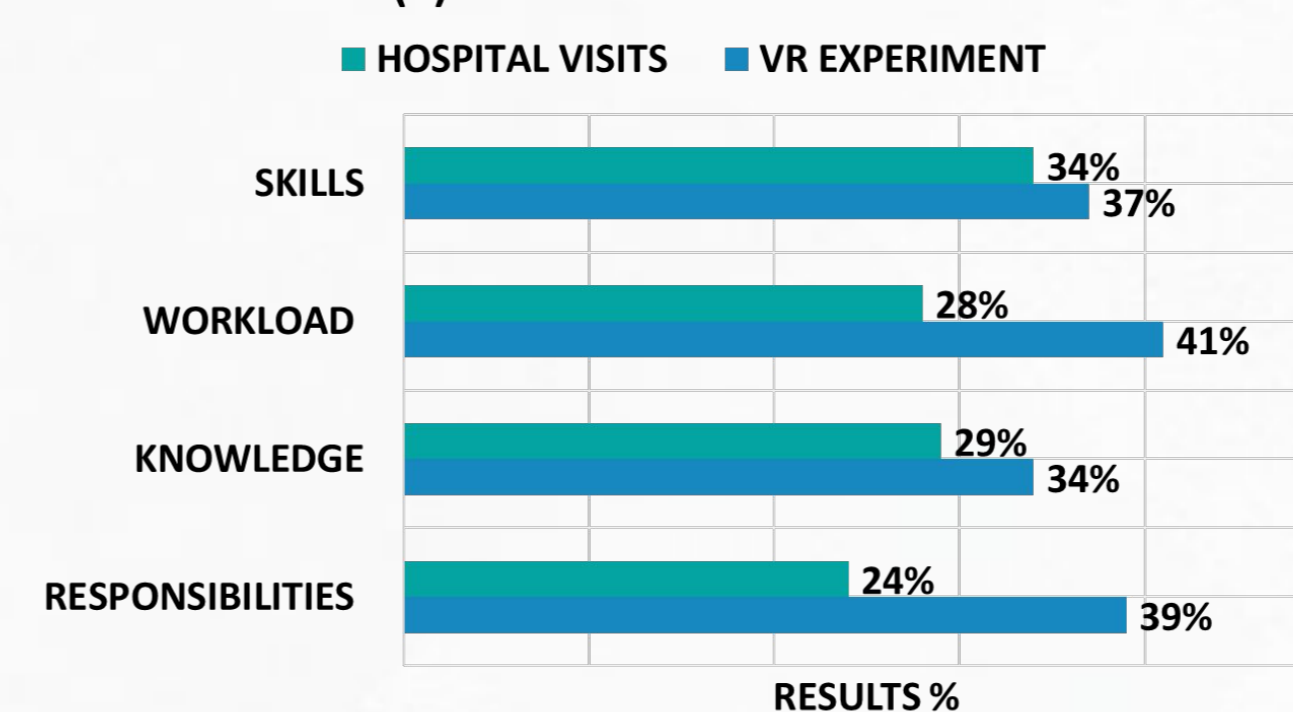


FIGURE (1): KNOWLEDGE TEST RESULTS (%)

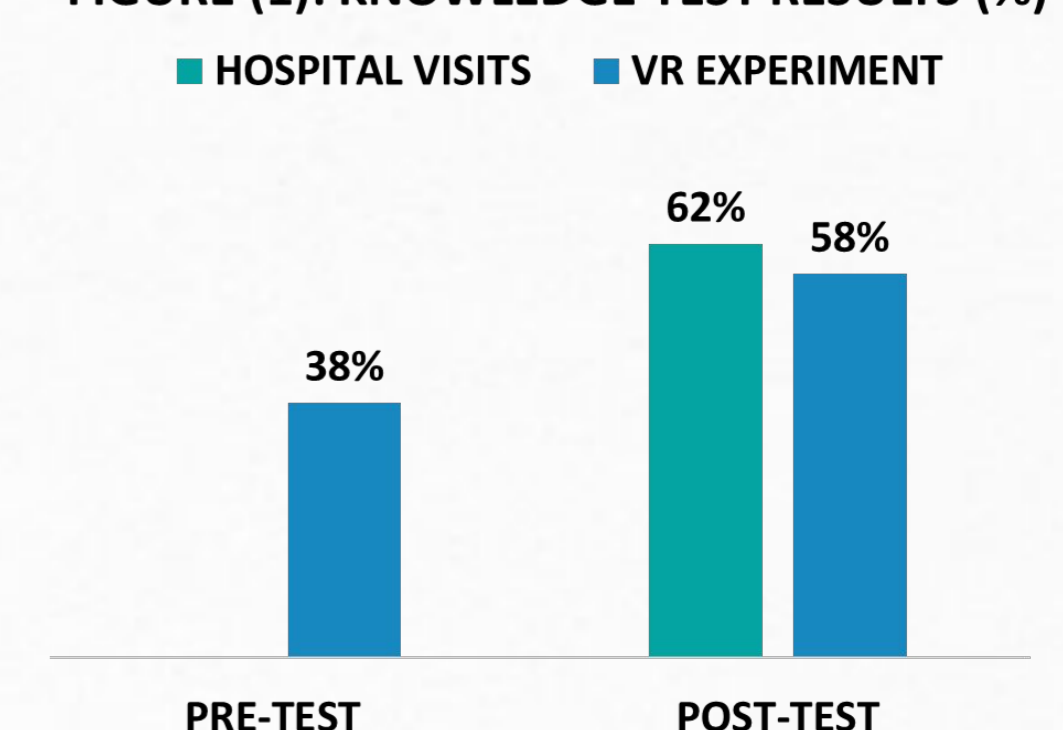
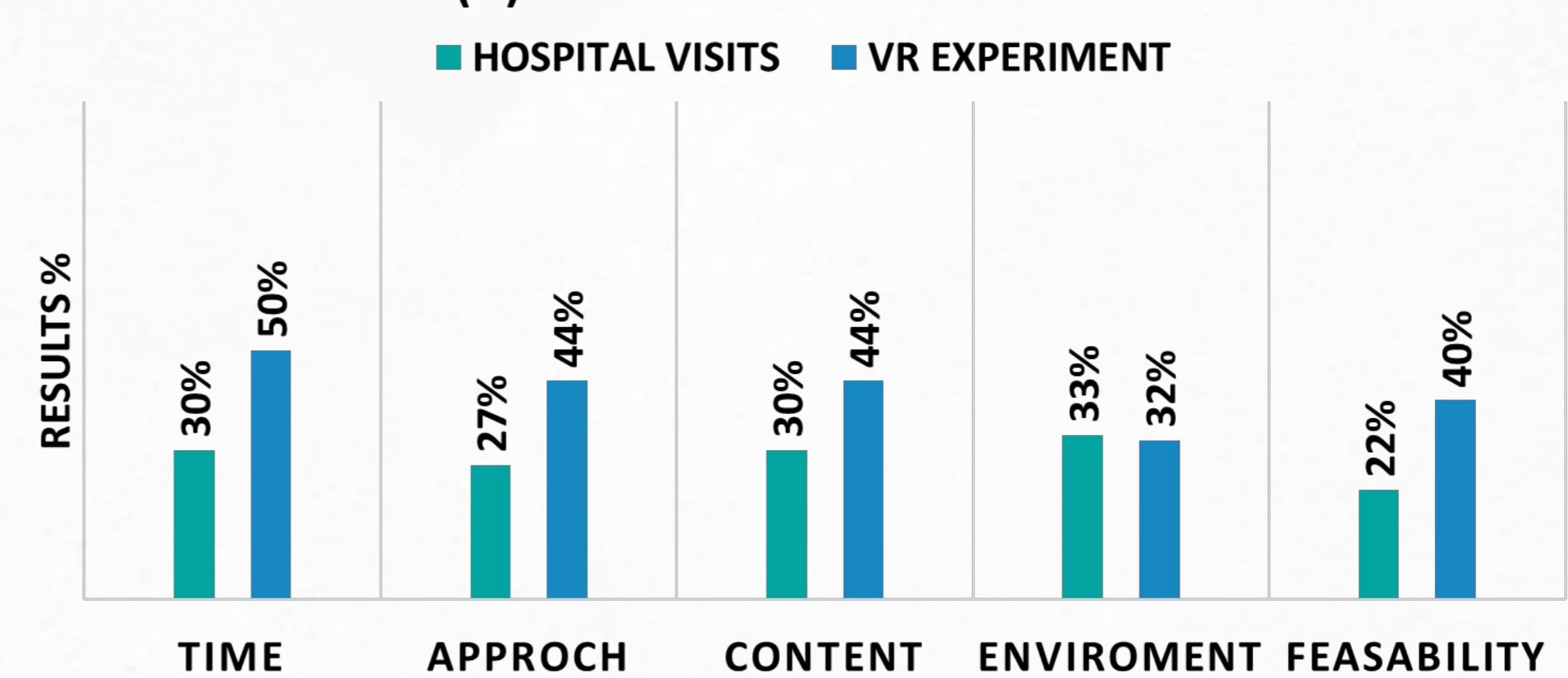


FIGURE (3): SATISFACTION SURVEY RESULTS



RESULTS

- The results showed an improvement in knowledge among experimental arm with an average of 1.93/6 in the pre-test and an average of 3.47/6 in the post-test
- Whereas, control arm had comparable score with an average of 3.75/6
- Experimental arm were more confident while choosing (Strongly Agree, Agree) on four 5-likert scale self-assessment statements assessing pharmacist role, skills, and responsibilities compared to controlled arm.
- Experience satisfaction on a five 5-likert scale statements assessing the video time, quality, content, and experience showed higher satisfaction within experimental arm compared to control arm
- Limitations: control arm conducted multiple hospital visits, and completed the previous year courses by the time of experiment. Meanwhile, the experimental arm conducted the VR experience once during the first month of the academic year

DISCUSSION & CONCLUSION

Our results demonstrate that VR learning experience provides a standardized learning experience in IPPE when compared to traditional methods. Higher students' satisfaction was observed among the experimental arm. Thus, implementing VR should be encouraged in pharmacy practice experience courses within the curriculum.

REFERENCES

For references please scan the QR Code

