



# Assessing the Utility of Distraction Elimination on Student Focus and Retention



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## BACKGROUND

- Technology is being integrated into education at increased rates, and emerging studies show inverse correlations with screen time and maintained focus.<sup>1</sup>
- Personal testimonies from students and faculty indicate increased challenges to maintain focus.<sup>2</sup>
- There is a lack of literature on evidenced-based interventions to help students maintain focus in classroom settings.

## OBJECTIVES

- 1) To identify causes for class distraction and
- 2) To assess the impact of distraction reduction techniques and the effect on in-class assessments.

## METHODS

- First, second, and third-year pharmacy students were asked to participate in the voluntary project, which was approved by the IRB.
- Intervention and surveys were administered as shown in Figure 1.
- Data were compared via a two-tailed paired t-test, statistical significance was signified by a p value of  $\leq 0.05$ .

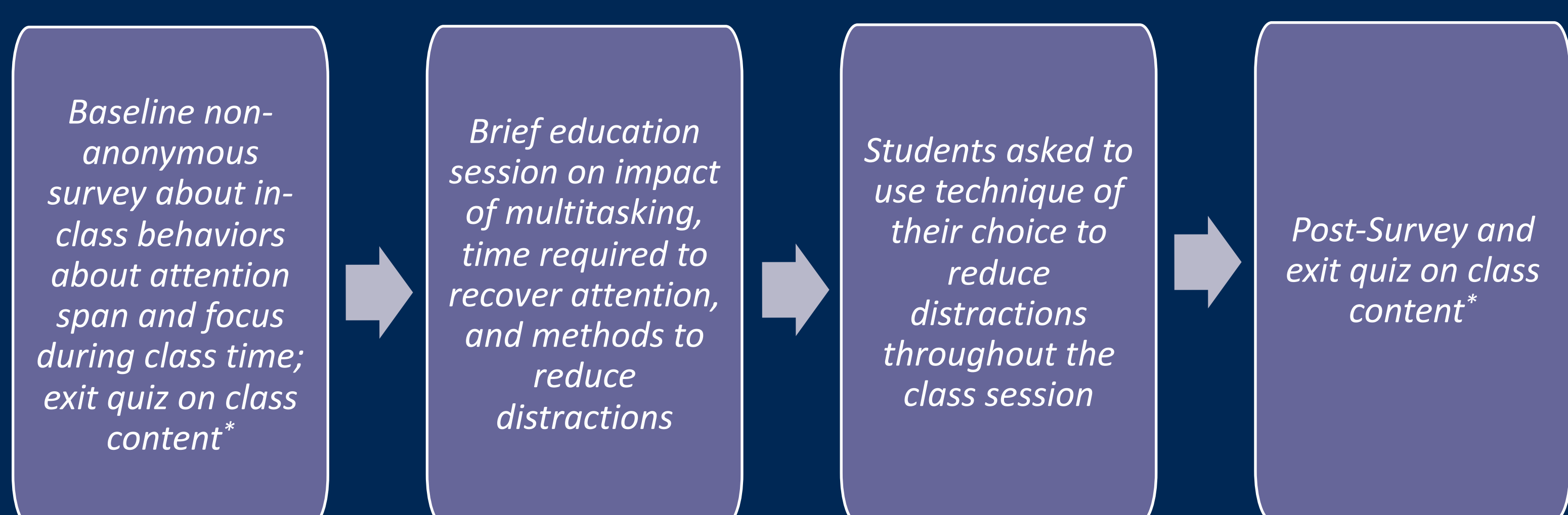


Figure 1. Experimental design chart

\*Exit quizzes on content, not attention

## RESULTS

- 140 students completed the pre-intervention survey.
- 72 (51%) of pre-intervention students completed the post-intervention survey with 59 (82%) using the suggested interventions and 13 (18%) choosing to not use the suggested interventions.
- The 68 students (49%) who did not complete the post-survey were not included in the comparative analysis, but their testimonials were taken into consideration.

	Pre-Intervention Average Quiz Score	Post-Intervention Average Quiz Score	Time to loss of focus pre-intervention	Time to loss of focus post-intervention
Intervention* Group N= 59	82%	86%	62.7 minutes	63.7 minutes
Non-Intervention group N=13	79%	84%	64.1 minutes	76.2 minutes

<u>Survey Questions and Most Popular Responses</u>	<u>Intervention</u>	<u>Non-Intervention</u>
Which of the following best describes how you took notes today?	Laptop/iPad (100%)	Laptop/iPad (100%)
What were you doing if your attention deviated from lecture?	Texting/social media message (45.8%)	Studying for an exam/non-class related work (53.9%)

\*Intervention students are those that completed both pre- and post-survey and reported using one of the reduced distraction techniques

## RESULTS

- The two areas of significant difference were an increased in 2<sup>nd</sup> day exit quiz scores amongst the intervention group (p=0.000193) and an increased time to loss of focus amongst the non-intervention group (p=0.015).

## CONCLUSIONS

- Distraction elimination techniques appeared to have a positive effect on exit quiz scores.
- Students not using distraction techniques reported longer reported focus time, but no significant change in quiz score.
- Do Not Disturb was the most popular tactic amongst students, and may be easily suggested in other classroom settings.
- Per student testimonials, eliminating electronics is commonly used as a study habit.
- More research is needed in this area to establish superiority of distraction elimination techniques.

## REFERENCES

1. Vujic A. Switching on or switching off? everyday computer use as a predictor of sustained attention and cognitive reflection. *Computers in Human Behavior*. 2017;72:152-162.
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## DISCLOSURE and CONTACT

Authors have no conflicts of interest to disclose.  
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