



How Smartphone-Based Clickers Can Lead to Distraction

What is this Research About?

In post-secondary learning environments, many instructors incorporate personal response systems to increase class interaction. Commonly known as clickers, these response systems can come in the form of a handheld remote, a smartphone app or a browser application. Clickers enable students to engage with the provided material. One problem with smartphone-based clickers is that they may increase multitasking such as texting and lead to potential negative effects on student attention. In this study, researchers surveyed students and conducted in-class observations of students' use of smartphones to investigate whether using smartphones as clickers increases student distraction and non-academic multitasking.

What did the Researchers Do?

The researchers observed students' use of smartphones during lecture in an advanced food-sciences undergraduate class. The researchers covertly observed students for 5 minutes immediately following the use of Top Hat (a personal response system) on their smartphones. They noted whether students continued to use their smartphones for non-academic tasks (e.g., texting, browsing the Internet) during the 5 minutes following the Top Hat question. The researcher also surveyed students about whether Top Hat diverted their attention from class.

What did the Researchers Find?

The researchers found that using smartphone-based clickers in a lecture resulted in students using their smartphones for non-instructional purposes during the 5 minutes after the clicker question had ended. Specifically, 42% of observed students used their smartphones for non-academic purposes in the first minute after the clicker question. Despite this finding, students reported that they did not find the use of a smartphone-based clicker to be distracting or detrimental to their focus in the class.

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➔ How to Implement this Research in Your Classroom

Smartphone-based clickers give students an effective method of engagement with lecture material but may lead to increased non-academic use of smartphones in class. This research showed that 42% of students used their smartphones for non-instructional purposes a few minutes after the clicker questions had been taken up. Survey results showed that students did not consider the use of smartphone-based clickers to be distracting, despite contrary evidence. Instructors interested in improving student interaction and engagement should consider using separate clicker devices that do not rely on students' use of smartphones, or inform students of the research on the effects of trying to multitask while learning.

➔ Citation

Ma, S., Steger G. D., Doolittle, E. P., Andrew, H. L., Griffin, E. L., & Stewart, A. (2020). Persistence of multitasking distraction following the use of smartphone-based clickers. *International Journal of Teaching and Learning in Higher Education*, 32 (1) 64-72.

➔ Keywords

multitasking
post-secondary education
student engagement

clickers
lectures
smartphones



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