

## **Summary of an Experimental Study**

**Reference:** Rosen, L., Mark Carrier, L., & Cheever, N. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers In Human Behavior*, 29(3), 948-958. <http://dx.doi.org/10.1016/j.chb.2012.12.001>

**Principle:** The purpose of this study is to explore how often students task switch from studying classroom material to another task, why they switch, and how this impacts their ability to learn while in a study environment with access to technology.

**Research Hypothesis:** Students will only maintain on-task behavior for short periods of time before switching to another task with the presence of technology in a study setting.

**Type of Design:** Participants were recruited by student observers to participate in a behavior study. The participants were told to select a study environment where they would typically study, and be observed for 15 minutes with access to their technology and study materials. The 263 participants were in middle school, high school and college.

**Independent Variables:** Students had their own study environment in a variety of locations including living room/den, bedroom bed, kitchen table, bedroom desk, and other. Each student had their own observer, and access to their technology in the study environment.

**Dependent Variable:** Each observer used the same Studying Observation Form to record their feedback, and were trained by the same source. Based on the main activity assessed during each observation, each minute's activity was assessed as clearly on task, off task, or unknown.

**Procedures:** Observers were trained on observation techniques through a single source. Participants were instructed to select a study environment where they typically study. The participant had to allow the observer full-view of any technology and media in the study environment. A 15-min study session was simulated, and the minute-by-minute Studying Observation Form was completed by the observer. Note: After the study the students were given a qualitative assessment on task-switching. This was the only qualitative assessment used in the study.

**Results:** Students from each level used certain technologies the same (online, on computer, e-mail, music, television), preferred the same level of task switching, were on-task about the same percentage of time, and had similar length on-task runs. On average participants were on task 65% of the time. During the 15-min observation period the participants were working on their studying task approximately 10 min. High school students appeared to spend more time chatting and texting; middle school students played more video games; and university students used more study strategies.

**Comments:** While observers were trained in a group to observe minute-by-minute behavior and were given the same observation form, their observations were not validated using a second observer for reliability assessment. I would like to see the study performed by the same person across the board, or have two observers in a controlled environment. A future study should consider assessing the purpose of using technology to determine its relevance to studying. In this study it was assumed that all communications were unrelated to the material being studied, and viewed as off-task. The students may have been using these tools to communicate with fellow students regarding the on-task material.