

CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

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Project Number

J0725

Project Title

Who Makes the Best Multitasker?

Abstract

Objectives/Goals

This study tested if gender, piano playing, use of T.V. use of the computer, or use of texting affects how a person multitasks.

Methods/Materials

Each test subject filled out a questionnaire and signed a consent form. Next, they completed an online test connected to previous Stanford University research, which had 6 practice problems and 20 scored problems.

Results

No single category of people were good multitaskers. Each category was just better at one part of multitasking. In other words, if one category was fast to perform a task, they would be slow and less accurate to switch tasks. The best multitasker would be someone with a low switch cost and a low answer time, but no category achieved this. Age, however, did affect the results. For the older test subjects, multitasking or task switching became more costly in terms of time and accuracy.

Conclusions/Discussion

While it could not be concluded whether gender, piano playing, use of T.V., use of computer, and use of texting affects how one multitasks, age did affect how well the tasks were performed. The younger people were more accurate and time efficient when they switched tasks. In a classroom or other learning environment, teachers could use this knowledge and give their students multiple short activities during the class period, instead of one long activity.

Summary Statement

This project is about how characteristics such as age, gender, piano playing and media use affect a person's ability to multitask.

Help Received

Mom and Dad helped analyze the data, my teacher Mrs. Culley helped find the Stanford test I used, the researchers at Stanford created the online test under the direction of Dr. Richard Nass.