Reviewer's report

Title: Are women better than men at multitasking?

Version: 2 Date: 29 April 2013

Reviewer: Raquel Benbunan-Fich

Reviewer's report:

Brief Summary
This paper reports the results of two experiments to compare the performance of men and women under multi-tasking conditions. The results indicate that women outperform men in a controlled experimental study and in a more realistic trial.

Comments for the authors
The topic is timely and relevant and the study makes a contribution to the field. The research question is clearly identifiable and important. However, the paper needs more work to relate the study to the current body of knowledge and to describe the results of the two empirical studies in a richer and more impactful manner. My suggestions below are aimed to help the authors address these issues.

In the Background section, the paper needs to clearly present alternative definitions of multitasking by describing the way in which multiple activities can be combined in a period of time. The multitasking continuum and the theory of threaded cognition, described in Salvucci and Taatgen (2008) and the principles of task independence and performance concurrency in Benbunan-Fich et al. (2011) could be helpful to improve the definition of multitasking. Although the simultaneous vs. task switching paradigm are the two predominant prototypes, the definition must be improved based on the most recent literature.

Since this study is about gender differences, the background section needs to explain the rationale for expecting that men and women will exhibit significant differences in multitasking performance. My own review of the existing literature on this topic suggests that there are two possible explanations: either psychological/cognitive differences between men and women, or environmental conditions that have historically placed more concurrent demands on women than on men (See for example: Halpern, 2000; Offer and Schneider, 2011; Zhou and Fu, 2009). A review of previous studies showing differences among genders in multitasking is missing (See for example: Criss, 2006; Havel, 2004; Sayer, 2007). This omission leads the authors to claim that there is lack of empirical evidence, when in fact this is not the case. A deeper review of the literature is necessary to identify alternative explanations for potential gender differences, and conflicting empirical evidence.

In section 3.1, the authors mention the work of Mantyla (Psychological Science, 2013) that found that men performed better than women when tasks need to be carried out simultaneously. A recent response to the work of Mantyla, by Strayer
et al. (2013) discusses potential explanations for their findings. The authors should discuss all the relevant prior work upfront and explain how their approach differs from, and adds to, existing studies.

The authors present the results of two empirical studies, whose findings suggest that women are better than men at multitasking. However, the reporting of these two studies is incomplete. For example, were subjects in the first study compensated? More importantly, in the second study, were the strategies used by participants of both genders substantially different? How many of them decided to take the phone call in the middle of their other tasks? Did this decision influence the results? A more complete discussion of working strategies with additional evidence would help rule out alternative explanations and substantiate the results.

Finally, it is advisable to use tables to report the results of the two empirical studies. For example, the information of Figures 1 and 3 should be presented in tables. In addition, RT (response time) should be spelled out where appropriate, and particularly at the beginning of section 1.2.

Recommendation: Major Compulsory Revisions regarding all the items mentioned above (review of prior work, additional evidence from the empirical studies and better reporting of results)

References


Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests