

For authors

The current study examined the relation between gaming experience and cognitive ability (i.e., reasoning). The main findings were that there was no significant relation between gaming experience and reasoning ability. The current manuscript, indeed, targets on an interesting and relevant topic; however, this manuscript is not well-written. The Intro does not provide sufficient information regarding extant findings as well as the rationale for current examination. Second, more details should be provided in the Method. Third, the Discussion is very weak with current format, and considerable efforts should be made to refine it. Overall, despite the current manuscript addresses a relevant topic and is consistent with the scope of PeerJ, it is suffered from several constraints in the way data was reported/elaborated. The authors should try their best taking care of the issues I raised to refine their work.

Major issues

Introduction-

1. One of the strengths of current study is the examination for the relations between specific types of game (i.e., action, multiplayer online, strategy) and reasoning ability. Therefore, efforts should be exercised on describing extant knowledge regarding this specific relation and why examination for this relation so important to the knowledge base when drafting the manuscript. Nevertheless, as far as I am concern, these issues have not been clearly elaborated by the authors.
2. Another noteworthy issue of current study should be that you target on school-aged children, population which is rarely focused by related studies. Thus, efforts should be exercised on noting why examination for this particular population important to the knowledge when drafting the manuscript. It might be helpful to address this issue with developmental perspectives.
3. The authors assume that individuals who play challenging games for more than five hours per week would demonstrate superior reasoning ability, which implies that you assumed regular engagement to games plays a role in mediating the relationship between gaming experience and cognitive ability. Accordingly, I would like to see the authors elaborate how regular/irregular engagement might modulate the relation.
4. The flow and logic of paragraph 3 looks somewhat strange to me. The authors use a topic sentence indicating that the predisposition for specific kinds of games may relate to cognitive performance; however, personally I would like to see the authors provide more details to justify this argument. Further, at the end of the paragraph, the statement “Unfortunately, many ofthe gaming enhancement hypothesis” is somewhat illogical. I believe this statement could be raised somewhere else.

5. It looks that the Bayesian approach is one of your strengths compared with previous works. Thus, I would like to see the authors provide more information on how this approach of analysis contributes to your study.

Methods-

There are several issues warrant further elaborations in Method-

1. No description for statistics?
2. What exactly the age range of your participants is?
3. Does the assessment for reasoning ability suitable to all of your participants?
4. Why use the RPM task as assessment tool for reasoning ability?
5. Any reports for the validity and reliability of your questionnaire/assessments?

Results-

In table 2, please notify/mark the significant pairs.

Discussion-

It is hard to see the contribution of current study if the authors only reported that the findings failed to support the hypothesis. I believe more discussion should be exercised regarding the findings. Currently the Discussion section is very weak.

Minor issues

1. There are several typing errors throughout the manuscript. Please correct them.
2. Though I am not a native English speaker, I believe some wordings should be corrected in the manuscript.