Response Letter

Dear Prof Zoltan Dienes,

Thank you for the opportunity to revise our study titled "Can adults automatically process and translate between numerical representations?". We sincerely appreciate the constructive feedback. Please see our responses to the two comments below in green. Changes in the manuscript have been tracked. We have also uploaded a clean version of the revised manuscript to our OSF directory. We hope the revised manuscript meets with your approval and look forward to hearing from you at your earliest convenience.

Kind regards,
Iro
On behalf of all authors

""We found that all three types of magnitude comparison necessitated WM resources, albeit in distinct ways"

The "in distinct ways" get the unjustified claim of a difference back in, so should be removed. The following sentences in the discussion clarify appropriately.

The "albeit in distinct ways" has now been deleted from the abstract.

""Also, we observed different interference effects in processing and translating numerical representations for smaller (1 - 4) and larger (5 - 9) numerosities, which were examined separately."

I see how you have emphasized the statement is based on separate tests; and thus the "different interference effects" claim is best read as literally a different pattern of significance and non-significance, which is true. However, an intuive reading still remains that it is a claim that the effects were different, and this may occur because so many researchers do draw that illegitmate conclusion in their own work (understandably - the rules of asserting conclusions in hypothesis testing are paradoxical). So you could add at the end "so differences in the effects cannot be claimed" (unless you tested the differences in interfernce effects and found them significant).

We agree and have included the suggested clarification "so differences in the effects cannot be claimed" at the end of the sentence.