Cerebral laterality as assessed by functional transcranial Doppler ultrasound in left-and right-handers: A comparison between handwriting and writing using a smartphone.

We are most grateful for the constructive comments by the recommender. The manuscript has now been revised and all of the comments were carefully addressed and changes made accordingly. The specific ways in which the manuscript has been modified to address the issues raised are discussed below.

Recommender's suggestion 1: Design table
I appreciate that you kept in the table due to the requirements for authors. (My apologies for this oversight; I'm familiar enough with the recommender guidelines but not the author guidelines it seems!). I personally prefer flowcharts for this purpose and for relatively straightforward designs I don't think this adds very much, but obviously you should follow the requirements. However, the table as it stands in the current version seems to contain errors:

- Under *Hypothesis 1 Analysis Plan* and *Rationale*, you still mention a prior scaled with r=0.2 instead of the new r=0.707.
- Under *Hypothesis 2 Question*, *Hypothesis* and *Analysis Plan*, the table still mentions handwriting and typing as separate t-tests, even though you removed the former.
- In your response letter you said you changed the orientation of the table (which I agree would be a good idea) but it is still the same.
- Obviously you could also keep this orientation, but then I'd definitely suggest further condensing the text (and this seems wise to me in either case):

  The sentences in the table make sense as part of the manuscript text but to make the table easily digestible you could simplify this much more. Is it necessary to say "*We will perform a Bayesian samples t-test...*" or would it suffice to say "*Bayesian dependent samples t-test...*"? Similarly, I don't think we need statements like "*This choice is justified because...*".

  Or under Hypothesis the phrasing "*There will be an absence of difference...*" sounds like a bit of a double (or even triple?) negative. I appreciate that Bayesian tests for the null lend themselves to this sort of awkwardness. But in the interest of clarity you could simply say "*There is no difference...*" or even more directly *"Cerebral laterality during handwriting is not different from writing with a smartphone"* (the fact that your outcome measure is the linguistic component after motion correction is established in the methods and so I don't think this even needs to be mentioned here).

  Obviously, these last few points are mere suggestions. You can write your manuscript however you like but I believe it is advisable to make it clearer for reviewers/readers.

Author's response
We thank the recommender for pointing out the necessary changes that had to be made to the overview table of the paper and for suggesting we condensed it more. We have now made the changes that reflect our new analysis plans and we have trimmed our text to make the table more

concise. We also need to clarify that the change in the orientation that we had made was not on the overview table itself, rather the layout of the page. The page has been shifted in a landscape mode, so there is more space for the overview table. We hope that after those changes the table is more readable.

Recommender's suggestion 2: Link to your preregistered manuscript
Please ensure that the link in the system points to the latest version of the manuscript (ideally one with the last round of tracked changes). The current link points to the original version of the manuscript. It took me some time of clicking through to find the latest version. I am fairly familiar with using the OSF platform but I am sure many reviewers won't be. It also wouldn't be obvious to anyone coming in at this stage that this isn't the final version.

Author's response
We thank the reviewer for pointing out that the link that we had in our submission was showing the older version of the manuscript. We have now updated the link to show the folder in OSF that has all the versions of the manuscript, including the most recent one.

Recommender's suggestion 3: Bayes Factor criterion
I appreciate that you have updated the prior definition for your Hypothesis 1 test. The justification makes sense and all this is fine as it is. However, please note that a criterion of BF10=3 and 1/3 is insufficient for the evidence threshold set by many RR-friendly journals. Of course there are still many RR-friendly journals that do not have a strict minimum and you could still submit there when the Stage 2 manuscript is accepted (and in fact you don't need to submit to any journal). If you do want to meet those stricter thresholds, you probably need to rethink the sample sizes.

Author's response
We thank the recommender for accepting our updated definition for Hypothesis 1. We acknowledge his concerns over our new BF10 thresholds, but this was a change that had to be made in the context of this registered report to accommodate potential time and resource restrictions.