Dear Dr. Ljerka Ostojić,

We sincerely appreciate the reviewers’ and your effort, constructive comments, and suggestions on our manuscript “Is the past farther than the future? A registered replication and test of the time-expansion hypothesis based on the filling rate of duration”. We have made modifications to the manuscript based on the comments. In addition, to meet the requirement of the journal we would like to publish, we modified the format accordingly without changing any of the content. Our replies to your and the reviewers’ comments are as follows.

Comments & Replies to Recommender

1. In the abstract, you state ‘Moreover, the filling rate of duration was significantly higher in the past than in the future, as predicted, but was negligibly (study 1) or negatively (study 2) correlated with psychological distance.’ I am unsure whether this is the best way to summarise the results of the correlations as shown in the results of study 1 (p. 19: ‘Psychological distance was not significantly correlated with either the filling rate of duration (...) or the number of errands and events (...). However, psychological distance showed a significant correlation with the length of errands and events (...). Therefore, our hypothesis was not fully supported.’) and would suggest you describe the results of study 1 regarding the correlations in questions here in the abstract more clearly.

Reply: We sincerely appreciate your advice. We modified the abstract of our manuscript in accordance with your suggestion. In addition, we also made several modifications on other parts of the abstract to make it more concise.

2. On page 21, in the very last row, where you write 'Thus, our hypothesis is not supported.' - everywhere else you wrote in the past tense, so please consider editing the 'is' here to 'was'.

Reply: Thank you for pointing this out. We have corrected it to the past tense.

3. On page 22, in the discussion (first paragraph), it says 'However, no significant correlation between psychological distance and the filling rate of duration was observed.' This is in reference to Study 1, which is obviously correct with regards to filling rate of duration as the variable, however your results were more complicated given the other variables, so it may be worthwhile to expand this part of the discussion a little and summarise the whole range of results for study 1.

Reply: We appreciate your suggestion. We made the content clearer by rewriting one sentence containing the sentence you pointed out as ‘The correlation between psychological distance and the
length of errands and events was significantly positive, however, no significant correlation between psychological distance and the filling rate of duration, the number of errands and events were observed’.

4. On page 22, the last sentence says ’To the best of our knowledge, no such opposite results have been reported in any published TDE literature.’. Personally, I would suggest you delete this sentence, as it is not necessary, and - in the absence of presenting the results of a systematic review - also not really informative.

Reply: Thank you for your suggestion, and we also think it was not a necessary and informative sentence. We deleted it.

Comments & Replies to Review by Anonymous Reviewer

The introduction, rationale, and hypotheses appear to be the same as for the approved Stage 1 submission, and the authors also appear to have adhered to the registered procedures. However, I could not find a way to access the tracked changes version of manuscript to confirm this.

The data appear adequate to test the authors’ hypotheses and the conclusions seem justified by the evidence. All three of the potential reasons the authors give for the discrepancy between their unexpected findings and those of Caruso et al. (2013) are well delineated.

Conclusion: The studies reported in this manuscript provide an important challenge to the existence of and potential mechanisms of the Temporal Doppler Effect described by Caruso et al. (2013). The quality of the methods is high, and the authors are appropriately circumspect in the discussion. I recommend the manuscript be published.

Reply: We would like to thank you for confirming the requirements of Stage 2 manuscript and giving your approval. The tracked changes version can be accessed at this URL (https://osf.io/kuv7n).

Comments & Replies to Review by Chris Chambers

I greatly enjoyed reading this completed Stage 2 Registered Report. The authors have conducted the study faithfully according to the approved protocol; the results are reported clearly and transparently; and the Discussion is thoughtful and well considered. On a purely subjective level, I also find the results thought provoking -- going strongly against the original predictions in several ways -- and while this is not part of the Stage 2 evaluation, I think these findings could have a significant impact in contextualising and challenging previous conclusions. Overall, I judge that the manuscript fully meets the Stage 2 review criteria.

There is one very minor revision I would like to see prior to full acceptance. In accordance with the PCI RR TOP policy, the authors have publicly archived their study data and digital materials on the OSF (https://osf.io/x29k7/) but the URL to the repository does not appear to be stated in the Stage 2 manuscript.

Reply: Thank you for your appreciation and advice. We have attached the URL to the repository in the revised manuscript.