June 5, 2020

Marc Brysbaert, PhD

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Dear Dr. Brysbaert:

Dr. Mark Huff and I are submitting our manuscript entitled “The lrd Package: An R Package and Shiny Application for Processing Cued-Recall Data” to be considered for publication as an original research article in *Behavior Research Methods*.

Although cued-recall tests are commonly used in psychology, no open access tools that are freely available to researchers that can be used to quickly process the large amounts of lexical data that these studies generate. As such, this paper presents the *lrd* (lexical response data) package for *R*, which allows researchers to quickly and accurately score large amounts of lexical output, while also being able to control for minor errors in participant responses. In this paper, we provide an overview of the package, a user guide for scoring data in *R*, and introduce an *R Shiny* application that has been made freely available and can be operated using only Excel skills. We then show that data scored using *lrd* accurately reproduces manually coded data by using this program to replicate the results of two cued-recall studies and by testing the reliability of its output relative to hand coded data.

This manuscript is an updated version of BR-Org-20-148 and contains several notable revisions. First, we have updated the *Shiny* application to include new options for computing mean recall rates (at both the participant and condition levels) and have added plotting capabilities. Second, the *R* package has been updated to include a new function for computing each participant’s proportion of correct responses. Third, we have updated the scoring functions example (page 11) to include responses that differ by only one or two letters. Finally, the language throughout the manuscript has been updated to clarify that this program is designed specifically for processing cued-recall data.

We hope that *lrd* will both drastically reduce the amount of time spent coding lexical data and assist the reproducibility measures being adopted by the field by providing researchers with a standardized, open-source method for processing lexical output across psychological studies. This work is original and not under review elsewhere, and we report no conflicts of interest. We look forward to hearing about the suitability of our paper in *Behavior Research Methods*.

Sincerely,

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