**shiny rddapp bug report 3**

(originally from consultant Vivian Wong, with annotations by Irena)

**Data Tab**

1. Characters do not transfer in .CSV output (when opening with Excel, but worked fined with Apple’s Numbers)

A screenshot of a cell phone

Description automatically generated

1. ~~“Help” comments when scroll-over buttons or links? (from Felix:~~ [~~https://ebailey78.github.io/shinyBS/docs/Tooltips\_and\_Popovers.html~~](https://ebailey78.github.io/shinyBS/docs/Tooltips_and_Popovers.html)~~)~~
2. ~~The options for covariates and for alternative estimation for the SE are not obvious on this page (scrollover comments would help here).~~
3. What about selecting the assignment variable for the clustering option when the assignment score is discrete?
   1. Lee and Card write about using clustered standard errors for addressing specification error when the assignment variable is discrete? <https://www.princeton.edu/~davidlee/wp/RDerror.pdf>

**Assumptions Tab**

1. Add “reset” button for binsize and bandwidth for McCrary test?
2. Output for McCrary figures are nicely done.
   1. In Help file, acknowledge Cattaneo, Jansson, & Ma as an alternative that might make a difference if power is low?
3. I was looking for the following diagnostic checks on the assumptions page, but I think I need to implement this in the Estimates tab? Is it possible to automatically produce a table of covariate balance at the cutoff?
   1. Discontinuity in probability of treatment at cutoff?
   2. Balance test? Binary outcomes using LPM?

**Estimates**

1. Output Table opened in Excel (some characters did not transfer)

A screenshot of a cell phone

Description automatically generated

1. People have made a lot about the Imbens & Gelman paper recommendation to not use polynomial models for estimating RD effects. However, I think that their criticism could be easily addressed by also using a cross-validation approach for selecting an optimal polynomial length for the parametric model. Optional: You may think about include a data driven method for selecting an optimal polynomial length in the parametric model. There is a nice paper by Pei, Card, Lee, and Weber called “Local Polynomial Order in Regression Discontinuity Designs” that describe how to do this. <https://www.princeton.edu/~davidlee/wp/local_poly_order-8-1-18.pdf>
2. PNG figures (labels again seem too large … there is something off with all of the PNG figure labels?)
3. On figures, is it possible to give users an option to change the scale of axes?

A close up of a map

Description automatically generated

**Sensitivities**

1. Perhaps move legend labels to outside main area?

A close up of a map

Description automatically generated

1. Bandwidth sensitivity option did not work.

**MRDD**

1. Error messages for ITT of Fuzzy RDD estimates (estimates and graphical illustration)?
2. The figures for the different approaches are sooooo cool!
   1. I love that you can change the axis on the 3D plot
      1. Again, reset buttons might be useful here for figures (after changing degree orientation)
   2. Might be useful to note in the Help file that the density of observations are important to note in the MRDD, as the weights for the average treatment effects are derived from density of cases.
3. Characters aren’t transferred to excel from the .CSV file.
4. Cutpoint sensitivity resulted in an error message.

**Power**

1. Labels for the fuzzy boxes?
2. Figure 5.1: Simulation resulted in “disconnected from the server”

**Help Files**

1. Open Help file in new tab?
2. Equations and symbol characters were broken in Chrome browser.
3. I missed the options for kernel and covariate choice until *after* I read the Help file.