Revision history for repwr repository

Nathan (Nat) Goodman November 7, 2018

Release 1.30 2018-11-07

Supports supplementary material (resigsupp.Rmd) for the shortened blog post with results that didn't fit in the published post for reasons of space or pedagogy

New files

- R/doc_resigsupp.R generates figures and tables for resig supplement
- R/docfun_resig.R contains functions used by doc_resig; extracted from R/doc_resig.R
- R/docfun_resigsupp.R contains functions used by doc_resigsupp; adapted from R/docfun_resig.R

Deleted files

• R/doc_xperiment.R was just a stub that became obsolete

Major code changes

- New mechanism for generating figure and table names
 - names may have document-specific prefix, be section-specific, and occur in blocks with incrementing suffixes (e.g., S2-1a)
 - also handles names for 'extra' figures, ie, ones that don't appear in the document
- New scheme for running sections in doc_XXX functions
 - runs sections in sapply loop to allow uniform per-section initialization and setup
 - supports new figure and table names
- Doc-specific initialization moved from init to init_doc in R/init.R

Changed files

- R/datman.R
 - filename_fig, figname, filename_tbl, tblname implement new figure and table names
 - extends filename to handle NULL components
- R/doc.R
 - dodoc uses wrap_fun to parcel parameters between init, init_doc, doc_XXX function
 - dofig and dotbl use new figure and table names
 - figinc, tblinc, etc. manage figure and table names
 - dofig uses wrap_fun to pass correct parameters to figfun
- R/doc_readme.R, R/doc_repwr.R,
 - uses new scheme for running sections
- R/doc_resig.R
 - uses new scheme for running sections
 - uses xdata_near to generate data for nearexact case
 - removed code for functions called by doc resig moved to R/docfun resig.R
 - removed code for supplement moved to R/doc resigsupp.R
- R/init.R
 - moved doc-specific initialization from init to init_doc
 - init_doc includes initialization for new figure and table names
- R/plot.R
 - renamed legend.where to legend throughout that's what doc_XXX functions call it
 - when called the old way, legend matched legend.where and all was good.
 - with wrap_fun doesn't happen because code looks for exact parameter name
 - change arguments to all top-level functions for new figure names

- fix recurrent bugs that cause matrices to become vectors when selecting single row or column
- fix bug in ragm_legend that caused labels to misalign
- R/repwr.R, R/resig.R
 - run uses wrap_fun to parcel parameters between init, dodata, dodoc
- R/sim resig.R
 - doposr creates bias1 posr needed by resig supplement
- R/util.R
 - wrap_fun propagates locals and dots (...) to called function
 - ucfirst upper-cases first letter of string
 - extends cq to handle more atomic types
- R/Xperiment/detl_conditional.R, R/Xperiment/detl_handcrafted.R
 - port to new run, init schemes
- R/Xperiment/hack_proptrue.R, R/Xperiment/uri_answer01.R
 - port to new run, init, section-running schemes

Release 1.21 2018-09-27

Fixed typos and restored code accidentally deleted in version 1.20

Release 1.20 2018-09-26

Supports shortened blog post, Systematic Replication May Make Many Mistakes (resig.Rmd), kindly posted by Bob Reed on The Replication Network

New files

- R/doc_resig.R generates figures and tables for resig blog post
- R/sim_resig.R like R/sim.R but only computes measures needed for resig blog post: sig1, sig2, sdir
- R/resig.R like R/repwr.R but loads resig-specific files

Code changes

- Many changes to R/plot.R to support resig blog post:
 - Added 'plotratm' function to plot multiple rates for a single measure
 - Added 'spline' smoothing method
 - Added more line properties to 'extra' vertical and horizontal lines. Still a hack that will need further cleanup
 - Added specialized function for resig figure titles
 - Added ability to omit legend
 - Added plot.cutoff control consistently to all top level functions
 - Added col parameter to all plotXXXm functions to set colors for rate
- Added spline smoothing method to all line plotting functions. Uses R's smooth.spline

Bug fixes

• Fixed bug due to apply converting single row matrix into vector. sigh... Bug was present in several functions

Release 1.11 2018-08-31

Supports third draft blog post Systematic Replication Has Limited Power to Detect Bad Science (repwr.Rmd).

Document changes

• Blog post (repwr.Rmd)

- Added reference to new systematic replication study just published in Nature Human Behavior
- Deleted final paragraph with Oprah Winfrey quote: not really on-target
- Added words on posting comments using GitHub Issue Tracker

Release 1.10 2018-08-22

Supports second draft blog post Systematic Replication Has Limited Power to Detect Bad Science (repwr.Rmd).

Document changes

- Blog post (repwr.Rmd)
 - Changed title and added words in the Abstract, Introduction, and Discussion to clarify that the
 post is about systematic replications
 - Added references suggested by readers
 - Added more emphasis to David Colquhoun's point about taking into account the prior probability that studies are true
 - Added terms suggested by readers: direct replication, conceptual replication, study heterogeneity
 - Added sentence noting that "measures answer different questions, but all appear in papers or posts as tests to accept or reject replications" as suggested by reader
- README
 - Reflect changes to dodata and dodoc interfaces and clean default
 - Removed mention of technical notes document no point making promises I may not keep
 - Added mention of previous version (1.00) of blog post

Design changes

- Refactored data aggregation code into data_agg function and drag data type
- Added support for experimental sandbox code, mainly to document sandbox projects
- Improved dodata, dodoc interfaces. These are top-level functions called by run. May also be called directly
 - Moved processing of default values to init
 - Moved figscreen, fignew parameters from dodoc to init because they depend on doc which is not fully set until init
 - In dodoc, set default for docfun after init for same reason
 - In dodoc, prefix match xperiment doc for same reason
 - Added need.init parameter to avoid rerunning init when called from run
 - Set default for need.init to TRUE so top-level calls will run init
- Moved rate.type conversion from drat_order to data_rate; this is the natural place where I expect it to be
- Added ability to save figures to files without first plotting to screen; much faster!

Changes to directory and repo organization

- Added version-specific copies of blog post documents
- Removed data files from repo. I was only storing files needed to draw figures which seemed like good idea but interacts poorly with caching scheme. With the data files gone, user has to generate data before drawing figures
- Generated figures for non-default values of m; just for completeness

Bug fixes

- Setting from.type, relto.type in plot functions does not select desired posr
 - Caused by conflicting parameter defaults. plotrate and related functions provide default values for from.type, relto.type, posr.id and pass the values to called functions. By the time the values make it to get_posr which does the work, it looks like all three parameters were set by the original caller. get_posr calls casename_posr which lets id supersede the others

- Opted for simplest solution. Always use posr.id to identify posr. Give up trying to use from.type, relto.type
- Make sure data.list exists before trying to delete elements

Code cleanup

- Added vhlty parameter to plot functions to set line type for extra vertical and horizontal lines; quick hack, not very general
- Consolidated documentation (still just in comments, sorry) for all aggregate plot functions
- Changed default for 'smooth' in aggregate plots to aspline
- Required xperiment (experimental sandbox) doc types to explicitly set n, d, m to support multiple experimental sandboxes
- Changed clean.figure to clean.fig for stylistic consistency in init
- Changed calls to filename function to file.path for stylistic consistency
- Set default for clean to FALSE for all doc types; setting it TRUE for doc=readme simplified README document but complicated interactive use
- Set default for clean.memlist to TRUE; setting it based on clean led to hard-to-find bugs caused by stale data in memlist cache
- Removed ability for a single figfun call to draw multiple figures; doesn't work with new scheme for saving figures and I no longer use this feature

Release 1.00 2018-07-27

Supports first draft blog post Systematic Replication Has Limited Power to Detect Bad Science (repwr.Rmd) sent to external readers for feedback.

Release 0.93 2018-07-25

Release candidate

This version is nearly a complete rewrite of the previous version. Some highlights are

- Removed obsolete scripts including R/scope.R and R/distr.R
- Added R/repwr.R and many other scripts
- For data, added current top-level files needed for analysis and plotting. Did not add data subdirectories as these are huge (261 MB for m=1e3, 980 MB for m=1e4) and not needed once the simulation is done

Release 0.92 2018-01-01

scope.R

- Added plot_cross, plot_pclose1
- Integrated d2t probability functions from distr.R
- Systematically precomputed useful data tables: d1, d33, dcross, dsig, dclose, dcrit

distr.R

- Added pval2t, pval2d functions
- Corrected usage of lower.tail parameter in d2t probability functions

Release 0.91 2017-12-19

- Change sampling distribution from normal to noncentral t.
- Remove unused code.
- Clean up code for translating Cohen's d to t-statistic and t-distribution; simplify function names.

Release 0.90 2017-12-07

First version. Ready for feedback from external readers.

Copyright & License

Copyright (c) 2017-2018 Nathan Goodman

The software is **open source and free**, released under the MIT License. The documentation is **open access**, released under the Creative Commons Attribution 4.0 International License.