



REDCapTidieR

Makes it easy to read REDCap Projects into R

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Outline

- Why REDCapTidieR?

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- Loading a REDCap project into R
- Adding labels and summary statistics
- Exporting to Excel

Why REDCapTidieR?

- Make it <u>easy</u> to import REDCap projects into R
 - Even if they are complex: longitudinal, repeated events or instruments, surveys, and/or data access groups (DAGs)
 - Pulls data and metadata into a single object that can be easily explored in RStudio IDE
- Make it <u>robust</u> and <u>performant</u>
 - Built on top of REDCap
 - 97% test coverage
 - Extensive error checking with helpful error messages
 - Profiled to use base R where we found bottlenecks
- Support <u>labels</u> (using {labelled}) and <u>summary stats</u> (using {skimr})
- Make it easy to export a <u>collaborator-friendly</u> Excel file

Loading a REDCap Project into R

- The main function is read_redcap()
 - Requires REDCap URI and API token

- Returns a supertibble (tibble of tibbles)
 - Contains data and metadata
 - Data is transformed in intelligent ways to make it more user-friendly (described in detail in the "Diving Deeper" vignette)
 - Can be piped into other REDCapTidieR functions

Adding labels and summary statistics

- Use make_labelled() to add labels
 - Requires {labelled} package to be installed
 - Uses REDCap field labels
- Use add_skimr_metadata() to add summary statistics
 - Requires {skimr} package to be installed
 - Adds summary stats to the **metadata** tibble for each instrument

Exporting to Excel

- Use write_redcap_xlsx() to export to Excel
 - Requires {openxlsx2} package to be installed
 - One tab per instrument plus TOC and Metadata tab
 - Supports labels

Demo

Try It for Yourself!

REDCapTidieR 0.4.0 Get Started Glossary Reference Articles ▼

REDCapTidieR

The REDCapTidieR package provides an elegant way to import data from a REDCap project into an R environment. It builds upon the REDCapR package to guery the REDCap API and then transforms the returned data into a set of tidy tibbles.



REDCapTidieR is especially useful for dealing with complex REDCap projects that are longitudinal or include repeating instruments or both.

Installation

The release version can be installed from CRAN.

install.packages("REDCapTidieR")



https://tinyurl.com/redcaptidier

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