## **Screening Results Integrator User Guide**

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#### **Overview**

**Screening\_Results\_Integrator.R** is an R program designed to combine screening results from different behavioral experiments conducted using the SleepMat software.

# **Prerequisites**

Before running the **Screening\_Results\_Integrator.R** program, ensure you have the following installed on your computer:

- R
- RStudio

Additionally, download the R program **Screening\_Results\_Integrator.R** from the GitHub repository.

## **Instructions**

### **Step 1: Create the Location Info File (File path of screening results)**



- 1. Open a new Excel file and name it as you like (e.g., location info.xlsx).
- 2. In the first row, create headers for your columns:
  - o **First Column (Run Number):** You can use any header name. Enter the run numbers below this header.
  - Second Column (Location): You can use any header name. Enter the screening results file locations generated by SleepMat corresponding to each run. You can copy and paste the file locations here.
- 3. Enter all the run numbers and their corresponding monitor file locations.
- 4. Save the Excel file.

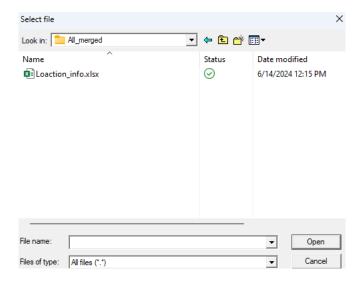
#### Step 2: Run the Screening\_Results\_Integrator.R

1. Open RStudio.

- 2. Open the **Screening\_Results\_Integrator.R** program in RStudio.
- 3. Click the 'Source' tab at the top left of the program window.

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Screening_Results_Integrator.R ×
      🗊 📗 🗌 Source on Save 🔍 🎢 🗸 📗
   15
   16
      rm(list = ls())
   17
   18
       packages = c("readx1", "dplyr", "openxlsx")
   19
   20
   21
      ## Load or install the required packges
       package.check <- lapply(</pre>
   22
         packages,
   23
         FUN = function(x) {
   24 -
           if (!require(x, character.only = TRUE)) {
   25 +
             install.packages(x, dependencies = TRUE)
   26
   27
             library(x, character.only = TRUE)
   28 -
   29 -
   30 )
   31
   32
   33
       main_excel_file<-file.choose() # Browse for folder location file
   34
   35
   36
       # Main function to combine data from all folders
   37
   38 - combine_all_folders <- function(main_excel_file) {
         # Read the main Excel file to get the folder paths
   39
         main_data <- read_excel(main_excel_file)</pre>
   40
```

4. A file browser window will pop up. Browse and select the Excel file (location info.xlsx) you created.



- 5. Click the 'Open' button.
- 6. The following line appears on the R console 7. Enetr a file name to save the results:
- 8. Enter the file name where you want to save the results (Eg: Combined\_screening\_results\_1)
- 9. Once you enter the file name, the integration process will begin, and the results will be saved in the same folder as your input files.