Instructions for Launching Shiny Application

This document describes how to launch the application that accompanies the article:
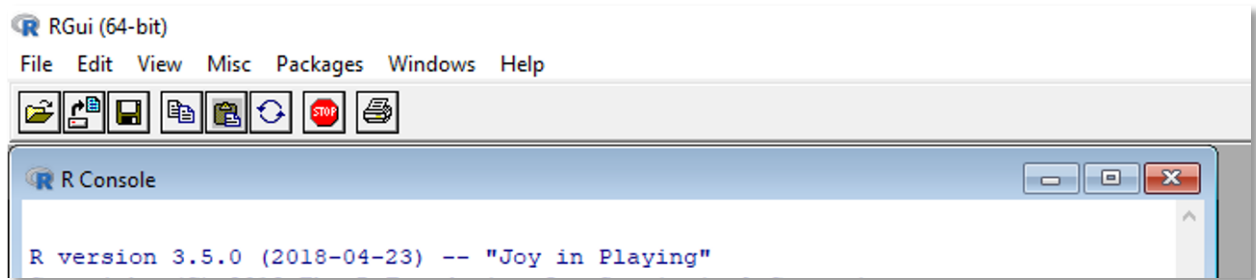
Tulsky, D. S., Kisala, P., Boulton, A. J., Jette, A., Thissen, D., Ni, P., … Reeve, B. B. (in press). Determining a Transitional Scoring Link between PROMIS® Pediatric and Adult Physical Health Measures. *Quality of Life Research*.

The application allows users to link PROMIS® Pediatric and Adult Physical Function measures via linking coefficients provided in the article. The application is written in the R statistical/graphical computing language (https://cran.r-project.org/) using the Shiny add-on package (https://www.rstudio.com/products/shiny/). The Shiny package provides a framework for easily transforming R code into web-based applications.
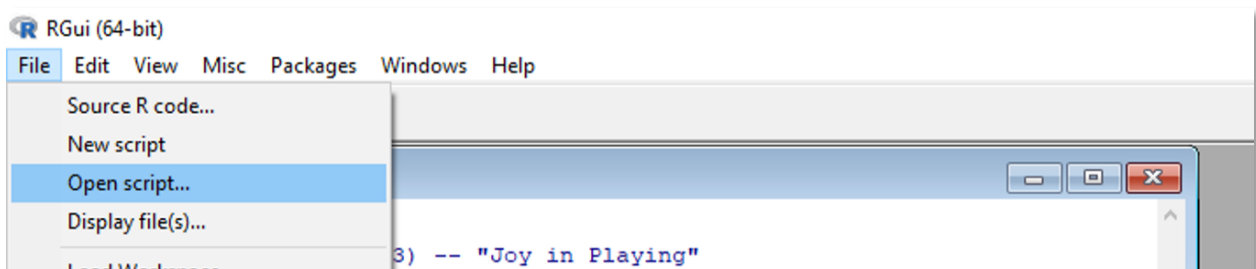
To use the application, users must download and install R. Instructions for downloading R can be found on the Comprehensive R Archive Network (CRAN) website at https://cran.r-project.org/.

Once installed, following these steps:

1. Open the R graphical user interface:

2. Go to File > Open script. Open the file `launch_app.R.`

3. A new window containing a code file will appear in current R session. In the second line of the code file, insert the folder location containing the `app.R` file (the same directory where the current document resides) where it states "INSERT FILEPATH HERE". The file path must be enclosed in quotation marks. For example,

```
R C:\user1\shiny_app\launch_app.R - R Editor
# Run the following code to launch application in web browser
setwd("INSERT FILEPATH HERE")
if("shiny" %in% rownames(installed.packages()) == FALSE) {
  install.packages("shiny")
}
library(shiny)
runApp(launch.browser = TRUE, display.mode = "normal")
```

```
R C:\user1\shiny_app\launch_app.R - R Editor
# Run the following code to launch application in web browser
setwd("C:/user1/shiny_app/")
if("shiny" %in% rownames(installed.packages()) == FALSE) {
  install.packages("shiny")
}
library(shiny)
runApp(launch.browser = TRUE, display.mode = "normal")
```

Note: In Windows, file paths use backward slashes (\). In R, users must use forward slashes (/), as shown above.

4. Go to Edit > Run all. This will execute the code and open the application in the user's default browser program. Further instructions are provided within the application.