

First /L+/ International Summer/Winter School on Language Acquisition

Practical session: R and R Studio

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Language and literacy development

Typical development

- Phonology
- Executive functions, learning and memory

Atypical development

- Down syndrome
- Children who are deaf
- Developmental dyslexia
- Developmental language disorder



Topics

-
- Why R?
 - Getting started?
 - A brief overview of R Studio
 - Reading in data
 - A bit of data manipulation
 - Visualising data
 - Some simple stats
 - Using RMarkdown for writing up reports

How?

- Before the practical session
 - Why R?
 - Getting started?
 - A brief overview of R Studio
- During the practical session
 - Reading in data
 - A bit of data manipulation
 - Visualising data
 - Some simple stats
 - Using RMarkdown for writing up reports



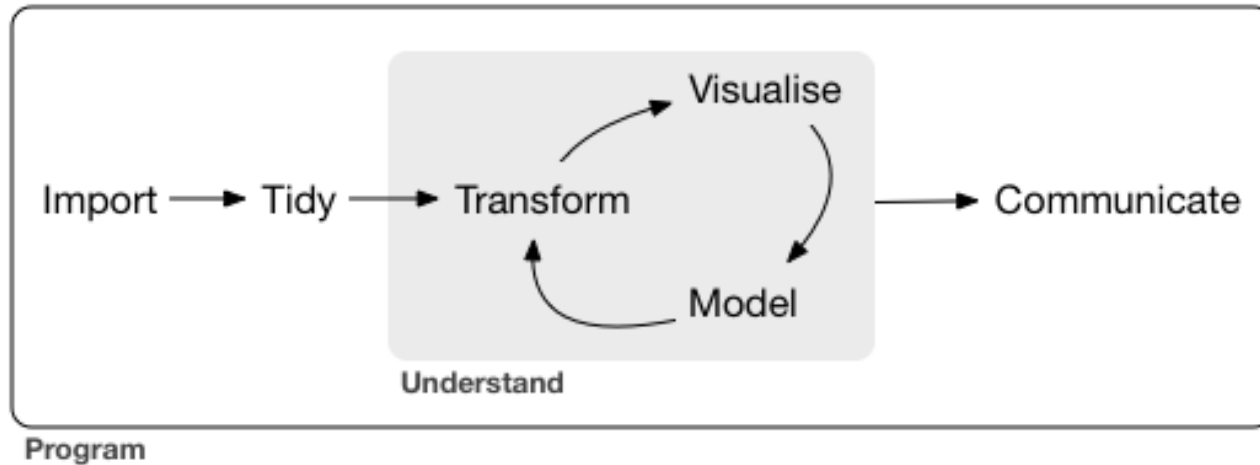
Why R?



- R is free, open source and runs across multiple platforms.
- R allows making 'data wrangling' an integral part of statistical analysis.
- R is conducive to open and reproducible research practices.

<https://www.r-project.org>

Workflow and R



Why R Studio?

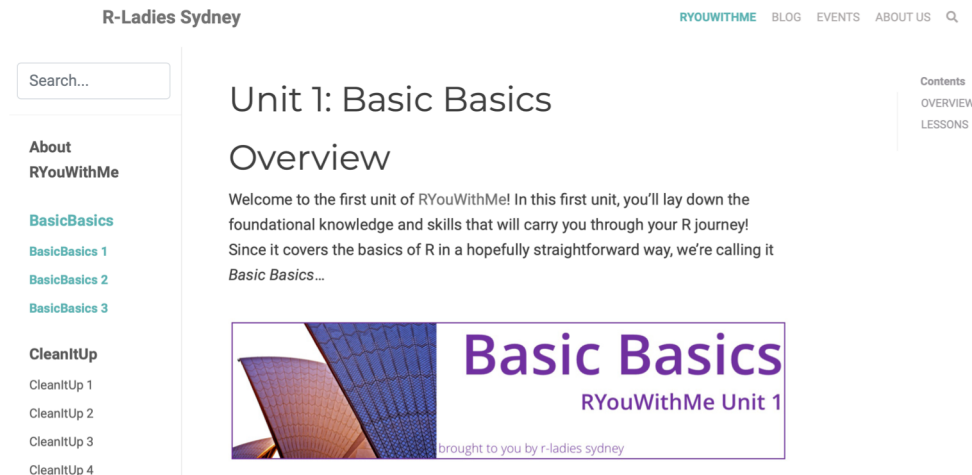


- It makes using R a lot easier!
- RStudio is free, open source and runs across multiple platforms.

<https://www.rstudio.com/products/rstudio/>

Before the practical session

- Why R?
- Getting started?
- A brief overview of R Studio



The screenshot shows the R-Ladies Sydney website. At the top, the navigation bar includes 'R-YOUWITHME', 'BLOG', 'EVENTS', 'ABOUT US', and a search icon. A search bar is located below the navigation bar. The main content area is titled 'Unit 1: Basic Basics' and 'Overview'. It includes a welcome message: 'Welcome to the first unit of RYouWithMe! In this first unit, you'll lay down the foundational knowledge and skills that will carry you through your R journey! Since it covers the basics of R in a hopefully straightforward way, we're calling it *Basic Basics*...'. Below the text is a banner image of the Sydney Opera House with the text 'Basic Basics' and 'RYOUWITHME Unit 1' in purple, and 'brought to you by r-ladies sydney' in small text. A sidebar on the left contains a search bar and a list of links: 'About RYouWithMe', 'BasicBasics' (highlighted), 'BasicBasics 1', 'BasicBasics 2', 'BasicBasics 3', 'CleanItUp', 'CleanItUp 1', 'CleanItUp 2', 'CleanItUp 3', and 'CleanItUp 4'.

<https://rladiessydney.org/courses/ryouwithme/01-basicbasics-0/>

During the practical session

- Reading in data
- A bit of data manipulation
- Visualising data
- Some simple stats
- Using RMarkdown for writing up reports



Wordbank

An open database of children's vocabulary development



<http://wordbank.stanford.edu>

<https://wordbank-book.stanford.edu/index.html>

Questions?

- Finding help.
 - Within RStudio
 - Google (!)



- Online resources.
 - Cheat sheets (<https://rstudio.cloud/learn/cheat-sheets>)
 - See next slide for an overview
- Ask questions during the practical sessions.

Resources – Where to start

- Introductions
 - [RYouWithMe](#) (Rladies – Sydney)
 - [R for Reproducible Scientific Analysis](#) (Software Carpentry)
- More on basics of working with data in R
 - [R Studio Primers](#)
- More advanced
 - [R for Data Science](#) (Hadley Wickam & Garrett Grolemund)
- Basic stats
 - [Teacups, giraffes and statistics](#) (Hasse Walum & Desirée de Leon)
 - [PsyTeachR](#) (Glasgow University)
- More comprehensive stats
 - [Winter, B. \(2020\). Statistics for Linguists: An Introduction Using R.](#)

To do now:

Go to the Rladies – Sydney ‘RYouWithMe’ website and complete the following units:

1. BasicBasics 1: Installing R and Rstudio + tour of Rstudio (20 minutes)
2. BasicBasics 2: Packages (15 minutes)
3. BasicBasics 3: Getting data into Rstudio (20 minutes)
4. CleanItUp 1: A start with data manipulation (30 minutes)

<https://rladiessydney.org/courses/ryouwithme/01-basicbasics-0/>

R-Ladies Sydney

[RYOUWITHME](#) [BLOG](#)

About
RYouWithMe

BasicBasics

BasicBasics 1

BasicBasics 2

BasicBasics 3

CleanItUp

CleanItUp 1

CleanItUp 2

CleanItUp 3

CleanItUp 4

Unit 1: Basic Basics

Overview

Welcome to the first unit of RYouWithMe! In this first unit, you'll lay down the foundational knowledge and skills that will carry you through your R journey! Since it covers the basics of R in a hopefully straightforward way, we're calling it *Basic Basics*...

