

# Data Analysis for Daily Diary and Experience Sampling Studies in R

A two-day workshop for PhD, early and mid-career researchers

12 – 13 December 2022

The ARC Centre of Excellence in Population Ageing Research (CEPAR) is proud to offer this 2-day workshop for early career researchers.

## Introduction

Daily diary and experience sampling methods involve sampling participants' experiences in natural environments, close to real-time, and on many measurement occasions. This course will provide an introduction to analysing daily diary and experience sampling data using R. We will cover tips for data analysis from start to finish, including pre-processing data, variable and scale creation (including reliability, centering, and lagging), multilevel descriptive statistics and correlations, plotting, and running and interpreting multilevel models (also known as mixed-effects models and hierarchical linear models). During the workshop, we will work together on an example dataset, and participants are also welcome to bring their own data along to the workshop to put what they have learned into practice. This workshop will use R, which is free and open-source: all R code will be well-documented, but if you are unfamiliar with R, we recommend reviewing the material under "Course Readings" below before the course.

The course is intended for PhD students and Early to Mid-Career Researchers across disciplines (i.e. in fields such as industrial relations, organisational behaviour, sociology, law, education, public health and beyond).

## Presenter's Biographies

### Dr Elise Kalokerinos

Elise Kalokerinos is a Senior Lecturer in the Melbourne School of Psychological Sciences, where she co-directs the Functions of Emotions in Everyday Life (FEEL) Lab. She completed her PhD in social psychology at the University of Queensland, and a Marie Curie postdoctoral fellowship at KU Leuven in Belgium.

She was a Lecturer and ARC DECRA Fellow at the University of Newcastle before joining the University of Melbourne in 2019. Her research centres on emotion, motivation, and self-regulation. She uses multiple methods to investigate these topics, with a particular focus on experience sampling studies conducted in daily life.

## Workshop Schedule

Day 1 (December 12<sup>th</sup>):

*Session 1:* Introduction to the Workshop and the Steps for Data Analysis

*Session 2:* Assessing Data Quality and Pre-Processing Data

*Session 3:* An Introduction to Within- and Between-Person Effects, Creating Scales and Variables (including Reliability, Centering, and Lagging)

*Session 4:* Multilevel Descriptive Statistics and Correlations

Day 2 (December 13<sup>th</sup>):

*Session 1*: An Introduction to Multilevel Modelling and Understanding lme4 in R

*Sessions 2 - 4*: Running and Interpreting Multilevel Models

### Optional Readings:

If you don't have much familiarity with R, we'd recommend reviewing Chapters 3 and 4 of *Learning Statistics with R* by Danielle Navarro before the course, which is freely available at this link:

<https://learningstatisticswithr.com/> (or any of the other many basic R introductions online).

### RSVPs

RSVP via email to [a.brushwood@unsw.edu.au](mailto:a.brushwood@unsw.edu.au) by the close of business 11 November 2022.

### Cost

There is no charge for the workshop. The workshop is supported by funding provided to CEPAR by the Australian Research Council to support the training of Early Career Researchers.

### Key Dates

**11 November**                  RSVPs close

**12-13 December**          Workshop

### Enquiries

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