

## PART II – Install Packages and Import Data

### 3. Installing and loading packages

```
> Install.packages("pastecs")
> Install.packages("nlme")
> Install.packages("car")
> Install.packages("lme4")
> Install.packages("gee")
```

Now load these packages into your library. This will allow you to access the functions within these packages.

```
> Library(pastecs)
> Library(nlme)
> Library(car)
> Library(lme4)
> Library(gee)
```

### 4. Setting up the working directory

Set the working directory to the folder you saved Donmez.csv. Executing the command `getwd()` will display your current working directory. The function `setwd()` will allow you to change the working directory:

```
> getwd()
> setwd("C:/Users/Owner/Documents") or
> setwd("C:/Users/Owner/Downloads")
```

### 5. Importing data

To import data into R and save it as a data-frame you can use the function `read.csv()`.

```
> data <- read.csv("Donmez.csv", header = T)
```

### 6. Examining and manipulating data

You can examine your data through the command `data`. The function `str()` will show the structure of the data-frame.

```
> data
> str(data)
```

The within-subject categorical variable, Scenario, must also be introduced to R as a factor. Otherwise, R will think the variable is numeric.

```
> data$Scenario <- factor(data$Scenario, levels = c("2", "3", "4", "5"), labels = c("One", "Two", "Three", "Four"))
```

Experience and SecondaryTask are between subject variables that are crossed. Participants (denoted by Participant\_ID) completed four scenarios so they have four data points each. Thus, participant is a random factor. We are not particularly interested in scenario effects.