# Lab 3: Navon lecturer’s notes

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## Lab class 3: Navon

This class focuses on how to write a report, while running a study that is relatively similar to the Stroop task that the students already know.

## Learning objectives for this class

* How to write a lab report
* Global v local processing
* Navigating an existing PsychoPy experiment to find details
* First basic SPSS analysis

## Basic structure

* Talk pt 1:
  + How to write a lab report (from Andy Field)
* Run the Navon study (this is a relatively short one)
* Break
* Talk pt 2:
* Data analysis (very similar to Stroop)
* Conclusions from group data

## Slides pt 1

The slides here are fairly self-explanatory (probably TOO much info actually)

## Slides pt 2

* As with Stroop analysis (hopefully just put up this slide and let students do it?)
* Copy data file to the network drive for group analysis
* Open the data file in Excel
* Go to the Trials tab (not pracTrials)
* Copy the *congruence* column to a new spot
* Copy the *resp.rt\_mean* column to be next to it
* Select this new set of data and sort by congruence
* (Drag the consistent/conflicting data to separate columns)
* Take averages of the conflicting/consistent RTs

While you go through the next slide the demonstrators should be doing the batch analysis. NB. For this experiment there often is no significant difference between conditions – the effect is very sensitive to small changes and attention (either using the batch analysis script or by typing in the data from the students’ own analyses). Need age and gender this time too for the reporting of participants

* For your report…

(Rather than go and try to do this yourself, I would leave the slide up and verbally tell students where to go while they do it themselves)

* How long was each component presented (e.g. fixation cross) on? (click on each component to see duration in seconds)
* How many stimuli? How many repeats? (click on the loops to see the info)
* Randomly presented?
* How many practice trials? How did they differ? (feedback routine)
* Where were they? (click on stimulus – it shows they were at $[xPos, yPos] which are being pulled from TrialTypes.xlsx. Note that the stimulus *units* are set to ‘pix’ so these xPos/yPos values determine the centre of the stimulus in pixels).
* When were subjects first able to respond? (keyboard doesn’t “start” until stimulus appears at 2.0s)
* How did the trial end? (the keyboard component has infinite duration, but pressing a button forces end of trial)
* Was there a pause before the next trial? How long? (gap before fixation cross appears)
* Group analysis results

For their reports students will need N participants and mean/range of age as well as a t-test (and graph?)

1. Get N male/female:   
   run >Analyse>Descriptives>Frequencies on the *gender*
2. Get descriptives for age:   
   run >Analyse>Descriptives>DescriptiveStatistics on *age*
3. Run t-test:  
   run >Analyse>CompareMeans>Paired-samples t-test comparing conflicting and consistent columns.
4. At this point the students probably don’t know about t-tests from stats lectures, so spell out what they need to write from the output table (ie mean RTs and t=xx,df=xx,p<xx)

* Summary

Aiming to put the students’ minds at rest.