Self-Referential Processing in Neuronal Populations of Ventromedial and Orbitofrontal Cortex

```
% -*- UFT -*-
% Author: behira
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% loading the data
clc
clear
data = readtable('data\stimlock.tsv', FileType='text'); % reading that tabular data
```

Subject and Experimental Condition

```
% create report object
report = stat_report(data, 'data\BHV.json', 'data\FrontalEcogvsSeeg.json'); % stat_report insta
% print some info
Uniq_id = report.report("num_indiv");
```

```
The total number of pt is: 22
```

```
report.report("number_total_elec"); % statistical summary of number of electrodes
```

```
The total number of elec is: 253, in total patients 22
 mean (std) # elec: 11.50(10.60), range =  [1,38]
```

Behavioral Data

```
report.report("number_trials"); % statistical summary of number of trials per condition
```

```
EP # trails: mean (std): 24 (1.2)
SJ # trails: mean (std): 24 (1.9)
MTH # trails: mean (std): 39 (1.7)
```

```
report.report("number_true_false") % statistical summary of number of trials responded with tru
```

```
EP true # trails replied with true: mean (std): 9 (4), range = [4,22]
EP false # trails replied with true: mean (std): 15 (4), range = [4,21]
SJ true # trails replied with true: mean (std): 16 (3), range = [8,23]
SJ false # trails replied with true: mean (std): 8 (3), range = [3,14]
MTH true # trails replied with true: mean (std): 21 (4), range = [15,31]
MTH false # trails replied with true: mean (std): 16 (3), range = [9,20]
ans = struct with fields:
     true: {[9 4 4 22]  [16 3 8 23]  [21 4 15 31]}
    false: {[15 4 4 21]  [8 3 3 14]  [16 3 9 20]}
```

```
report.report("reaction_time") % statistical summary of RT responded with true and false
```

```
EP true RT replied with true: mean (std): 3.67 (1.40), range = [1.35,6.48]
EP false RT replied with true: mean (std): 3.62 (1.40), range = [1.38,6.45]
SJ true RT replied with true: mean (std): 3.06 (1.33), range = [0.96,5.49]
SJ false RT replied with true: mean (std): 3.56 (1.27), range = [1.16,5.86]
```

```
MTH true RT replied with true: mean (std): 4.65 (1.84), range = [1.22,8.32]
MTH false RT replied with true: mean (std): 5.37 (2.04), range = [1.34,9.47]
ans = struct with fields:
     true: {[3.6700 1.4000 1.3500 6.4800]  [3.0600 1.3300 0.9600 5.4900]  [4.6500 1.8400 1.2200 8.3200]}
    false: {[3.6200 1.4000 1.3800 6.4500]  [3.5600 1.2700 1.1600 5.8600]  [5.3700 2.0400 1.3400 9.4700]}
```

```
report.report("veridicality") % statistical summary of response veridicality.
```

```
EP true veridicality replied with true: mean (std): 0.47 (0.15), range = [0.24,0.82]
EP false veridicality replied with true: mean (std): 0.70 (0.21), range = [0.11,0.96]
MTH true veridicality replied with true: mean (std): 0.87 (0.11), range = [0.60,1.00]
MTH false veridicality replied with true: mean (std): 0.79 (0.20), range = [0.29,1.00]
ans = struct with fields:
     true: {[0.4700 0.1500 0.2400 0.8200]  [0.8700 0.1100 0.6000 1]}
    false: {[0.7000 0.2100 0.1100 0.9600]  [0.7900 0.2000 0.2900 1]}
```

```
report.report("ECoGSEEG") % statisitcal summary of number of ECoG and SEEG electrodes as well a
```

```
ECOG = 13 +/- 11, [2, 38]
OFC = 0.76 +/- 0.33
MPFC = 0.24 +/- 0.33
SEEG = 6 +/- 6, [1, 13]
OFC = 0.50 +/- 0.58
MPFC = 0.50 +/- 0.58
```