## Solution in Stata: Exercises Day 5

**PSY8003** 

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## **Exercise 1: Factor analysis**

- Scree-plot suggests bw 4 and 5 factors
- Parallel analysis suggests somewhat more, up to 7 or 8
- we go with 5 because of theory (Big-Five)
- the loadings are as expected but there are quite some cross-loadings as well
- the CFA fit is not great and there are quite a few cross-loadings; not sure why that is the case, this is supposed to be a well-validated questionnaire

```
use "../data/psychbfi.dta"

factor A1-05, pf

screeplot, mean
quietly graph export pics/ex5_scree.png, replace

fapara, reps(25)
quietly graph export pics/ex5_fapara.png, replace

quietly factor A1-05, ipf factors(5) blanks(.3)
rotate, oblique promax(3) blanks(.4)

estat common
estat kmo
```