**Ejemplo con datos de habilidad.**

The tests are described as

general:a non-verbal measure of general intelligence using Cattell's culture-fair test.

picture: a picture-completion test

blocks: block design

maze: mazes

reading:reading comprehension

vocab:vocabulary

ability.FA <- factanal(factors = 1, covmat=ability.cov))

Call:

Las unicidades son muy altas, el modelo se ve no será bueno

factanal(factors = 1, covmat = ability.cov)

Uniquenesses:

general picture blocks maze reading vocab

 0.535 0.853 0.748 0.910 0.232 0.280

 Loadings:

 Factor1

general 0.682

picture 0.384

blocks 0.502

maze 0.300

reading 0.877

vocab 0.849

 Factor1

SS loadings 2.443

Proportion Var 0.407

La prueba Ho: R=modelo es de un factor. H1 no es ese modelo.

Test of the hypothesis that 1 factor is sufficient.

The chi square statistic is 75.18 on 9 degrees of freedom.

The p-value is 1.46e-12

factanal(factors = 2, covmat = ability.cov)

Las unicidades no cambian con la rotación

Uniquenesses:

general picture blocks maze reading vocab

 0.455 0.589 0.218 0.769 0.052 0.334

Loadings:

 Factor1 Factor2

general 0.499 0.543

picture 0.156 0.622

blocks 0.206 0.860

maze 0.109 0.468

La prueba Ho: R=modelo de dos factores. H1: R no es ese modelo. La ji cuadrada es pequeña, parecida a los grados de libertad, este modelo no se rechaza.

reading 0.956 0.182

vocab 0.785 0.225

 Factor1 Factor2

SS loadings 1.858 1.724

Proportion Var 0.310 0.287

Cumulative Var 0.310 0.597

Test of the hypothesis that 2 factors are sufficient.

The chi square statistic is 6.11 on 4 degrees of freedom.

The p-value is 0.191

factanal(factors = 2, covmat = ability.cov, rotation = "promax")

Uniquenesses:

general picture blocks maze reading vocab

 0.455 0.589 0.218 0.769 0.052 0.334

Quedan dos factores: F1 habilidad con palabra, F2 habilidad con figuras.

Loadings:

 Factor1 Factor2

general 0.364 0.470

picture 0.671

blocks 0.932

maze 0.508

reading 1.023

vocab 0.811

 Factor1 Factor2

SS loadings 1.853 1.807

Proportion Var 0.309 0.301

Cumulative Var 0.309 0.610

Test of the hypothesis that 2 factors are sufficient.

The chi square statistic is 6.11 on 4 degrees of freedom.

The p-value is 0.191