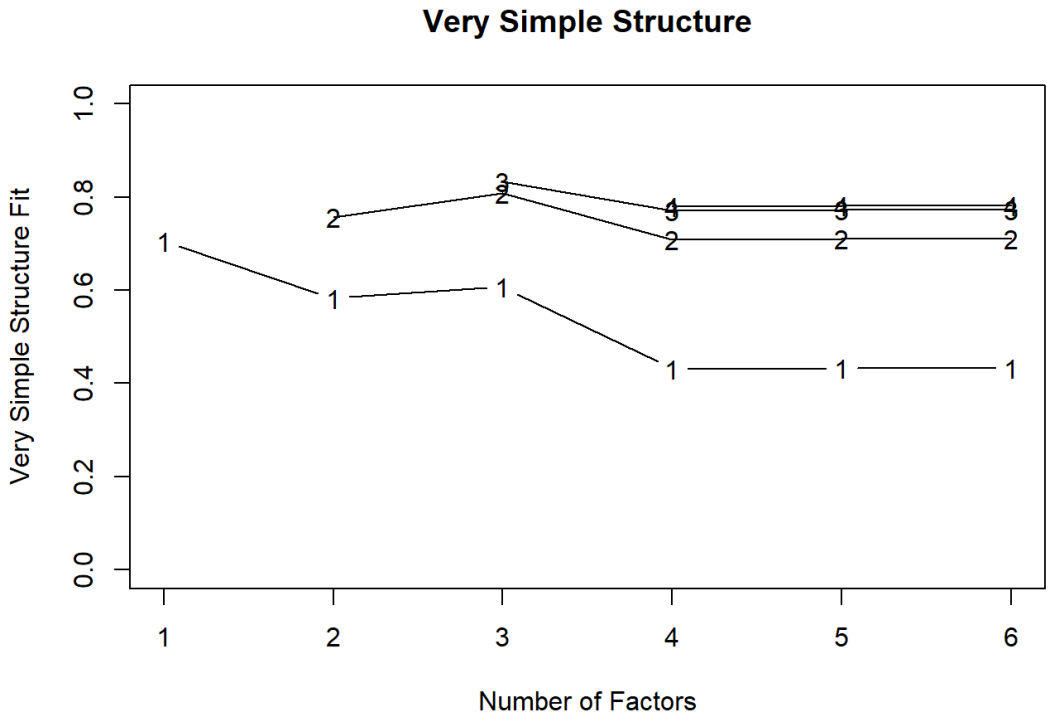
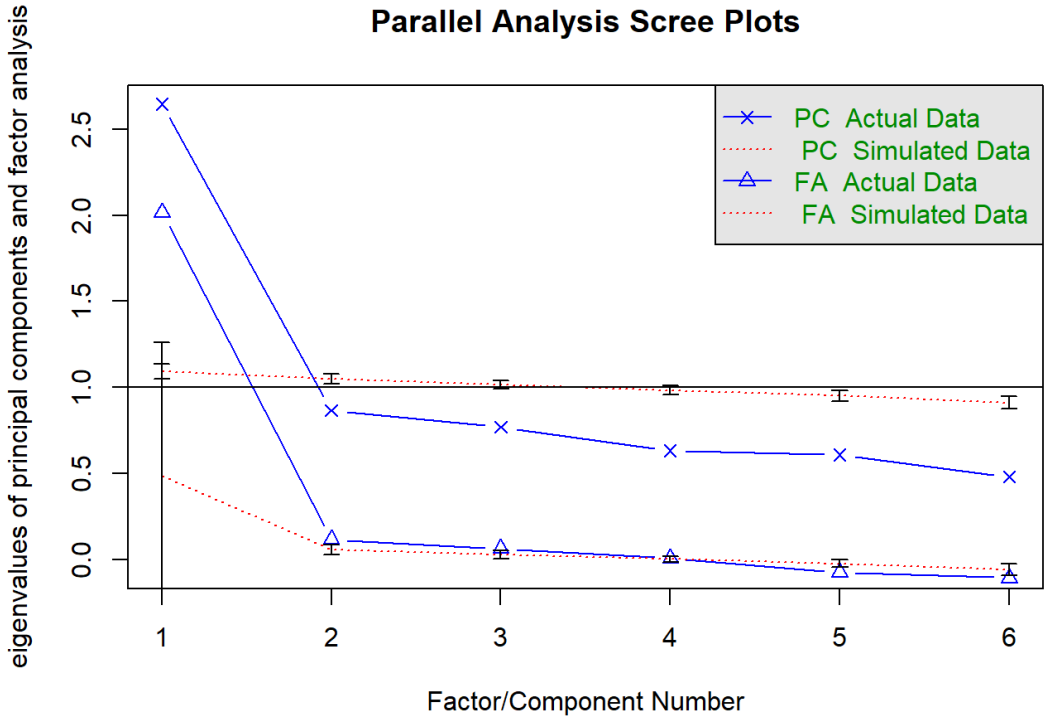
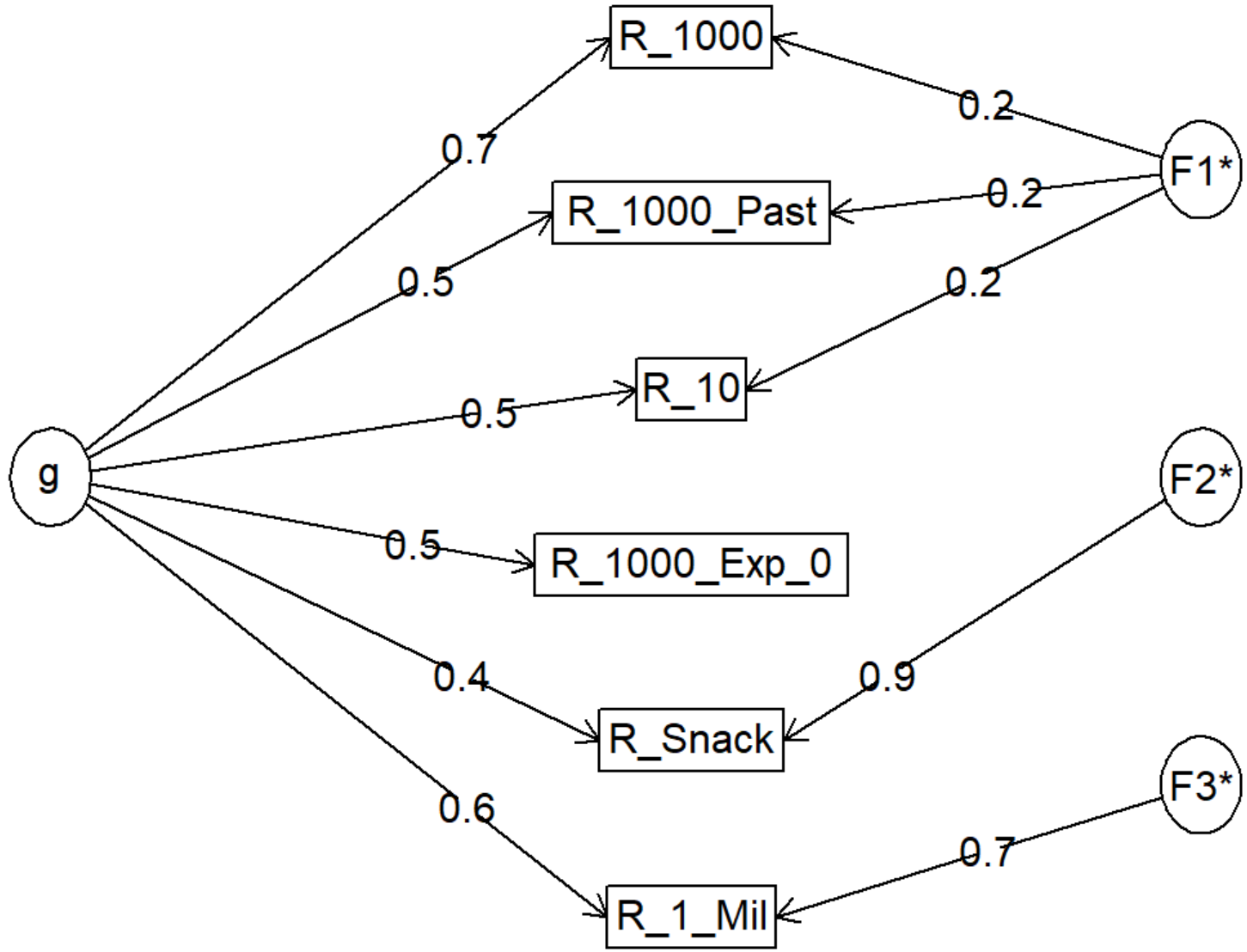
Bootstrapped Factor Analysis

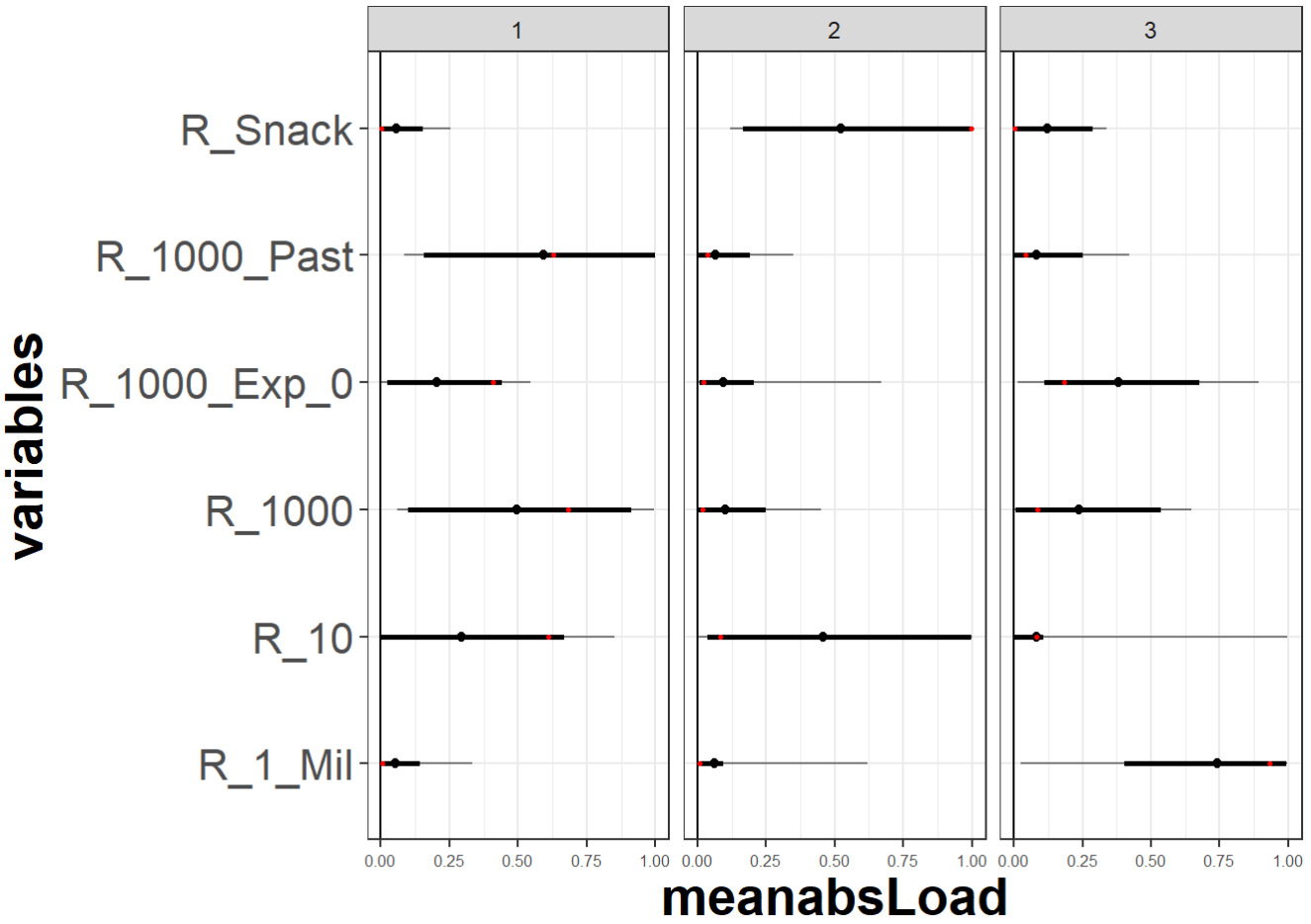

Very Simple Structure
Very Simple Structure Fit
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
Number of Factors

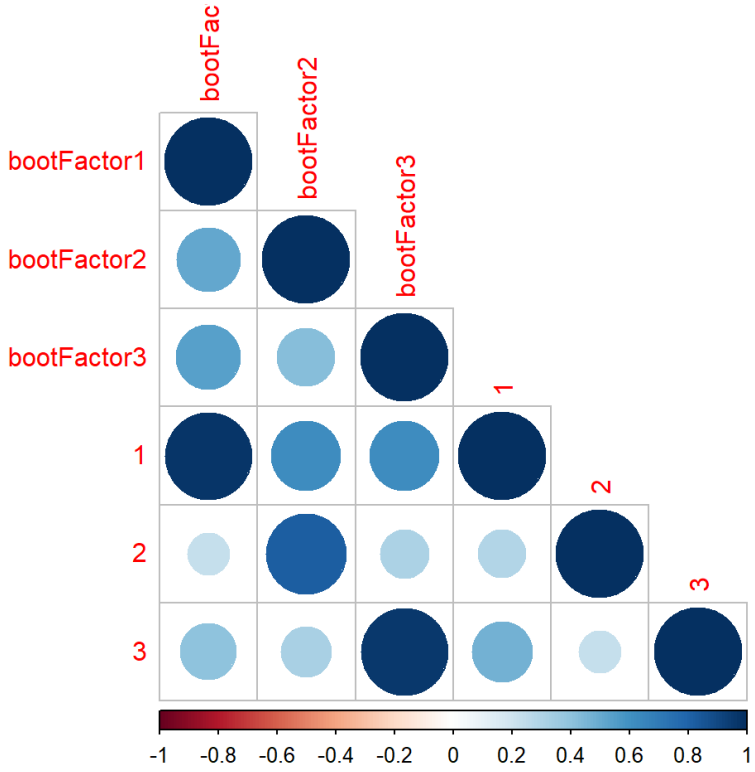

Parallel Analysis Scree Plots
eigenvalues of principal components and factor analysis
0.0
0.5
1.0
1.5
2.0
2.5
PC Actual Data
PC Simulated Data
FA Actual Data
FA Simulated Data
1
2
3
4
5
6
Factor/Component Number

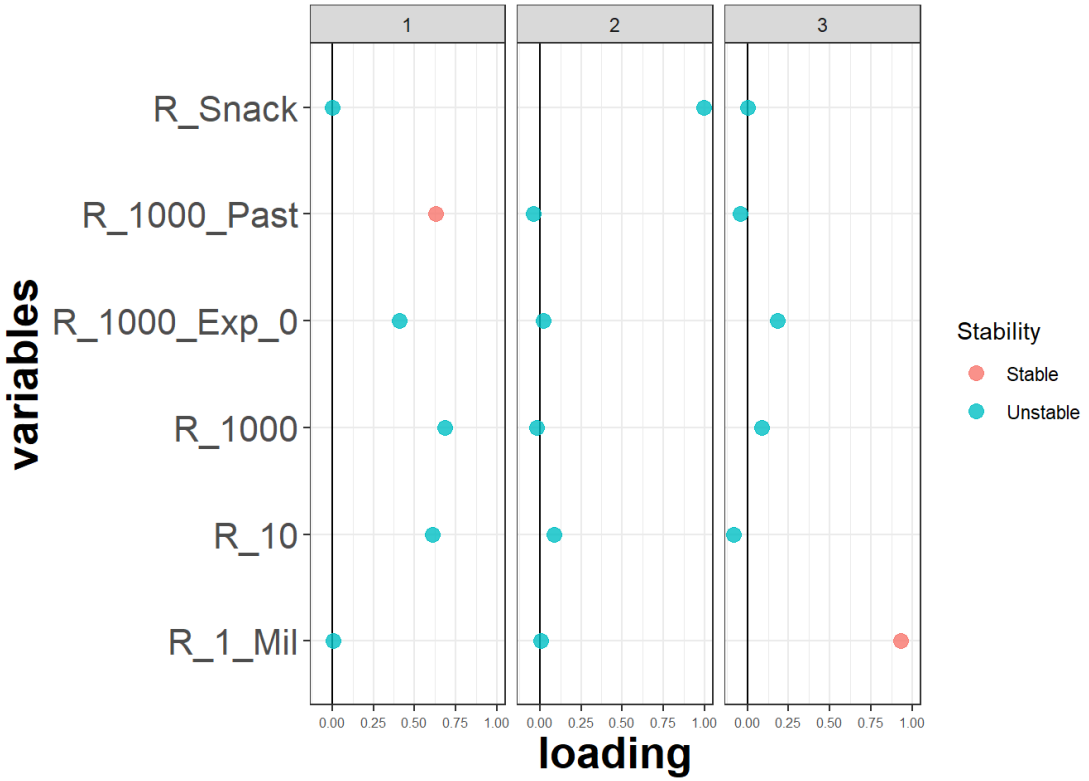
Omega

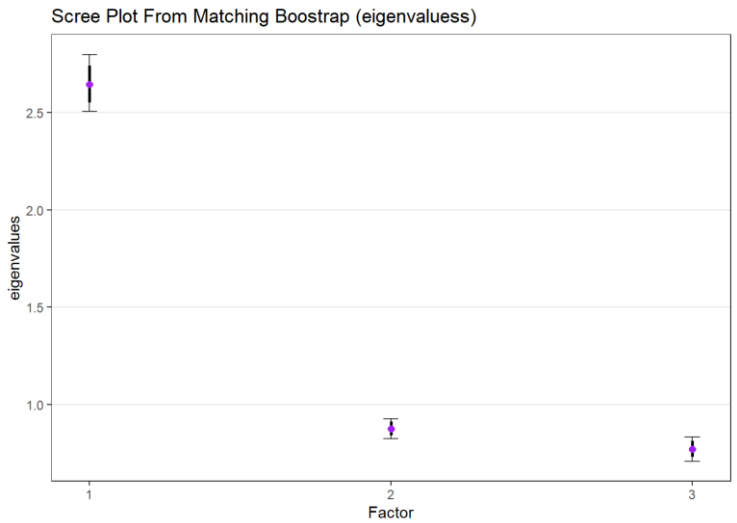

R_1000
R_1000_Past
R_10
R_1000_Exp_0
R_Snack
R_1_Mil
g
F1*
F2*
F3*
0.7
0.5
0.5
0.5
0.4
0.6
0.2
0.2
0.2
0.9
0.7

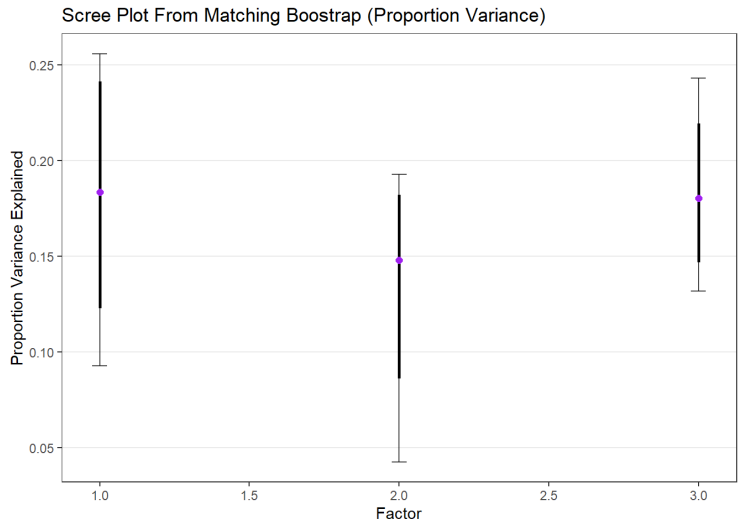
```
## Factor Analysis using method =  minres
## Call: psych::fa(r = dom_polycor, nfactors = NumFactors, n.obs = nrow(domain_data),
##     rotate = "oblimin", scores = "Bartlett")
## Standardized loadings (pattern matrix) based upon correlation matrix
##               item   MR1    MR2    MR3    h2      u2  com
## R_1000           2 0.684 -0.019  0.085 0.536 0.46411 1.03
## R_1000_Past      4 0.628 -0.037 -0.044 0.348 0.65229 1.02
## R_10             1 0.609  0.084 -0.083 0.356 0.64393 1.08
## R_1000_Exp_0     5 0.409  0.021  0.182 0.300 0.69989 1.39
## R_Snack          6 0.000  0.997  0.003 0.995 0.00493 1.00
## R_1_Mil          3 0.007  0.006  0.932 0.880 0.12004 1.00
##
##                        MR1   MR2   MR3
## SS loadings          1.445 1.013 0.957
## Proportion Var       0.241 0.169 0.160
## Cumulative Var       0.241 0.410 0.569
## Proportion Explained 0.423 0.297 0.280
## Cumulative Proportion 0.423 0.720 1.000
##
##  With factor correlations of
##       MR1   MR2   MR3
## MR1 1.000 0.356 0.611
## MR2 0.356 1.000 0.248
## MR3 0.611 0.248 1.000
```

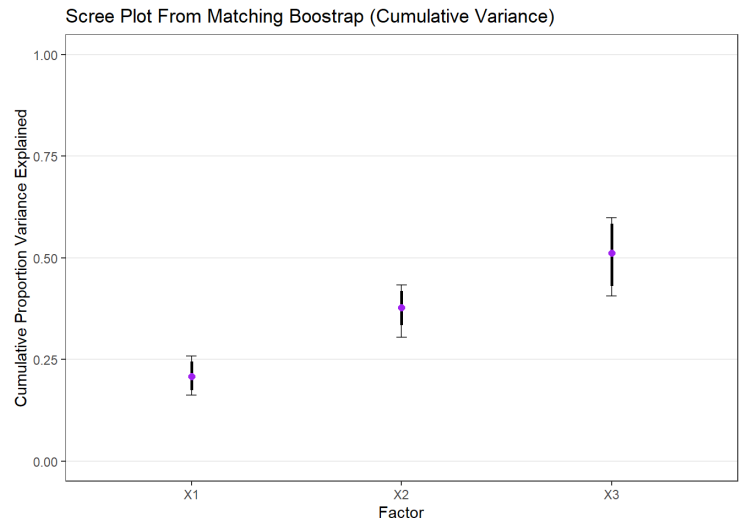



bootFac
bootFactor2
bootFactor3
1
2
3
bootFactor1
bootFactor2
bootFactor3
1
2
3
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1


1
2
3
R_Snack
R_1000_Past
R_1000_Exp_0
R_1000
R_10
R_1_Mil
variables
0.00
0.25
0.50
0.75
1.00
loading
Stability
Stable
Unstable


Scree Plot From Matching Boostrap (eigenvaluess)
eigenvalues
2.5
2.0
1.5
1.0
1
2
3
Factor


Scree Plot From Matching Boostrap (Proportion Variance)
Proportion Variance Explained
0.25
0.20
0.15
0.10
0.05
1.0
1.5
2.0
2.5
3.0
Factor


Scree Plot From Matching Boostrap (Cumulative Variance)
Cumulative Proportion Variance Explained
1.00
0.75
0.50
0.25
0.00
X1
X2
X3
Factor