Model\_Description

2022-05-11

# SI-Characteristics

The following were the initial SI-Characteristics decided through preliminary research and discussion rounds:

![SI Characteristics](data:application/pdf;base64,)

SI Characteristics

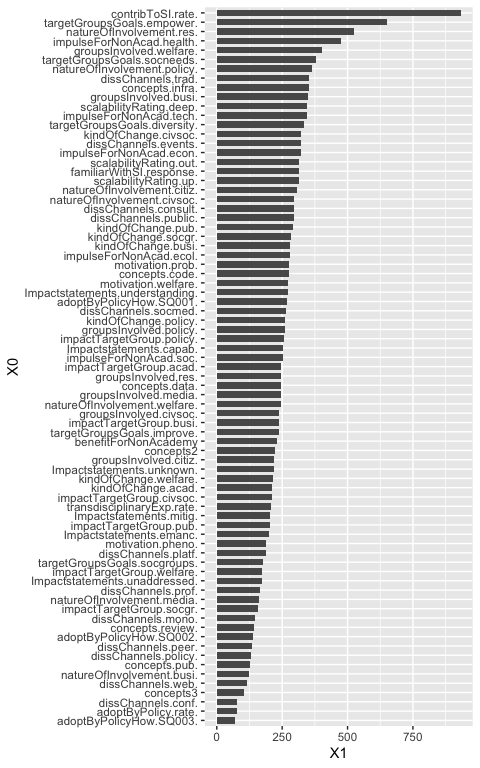
# Variable Preprocessing

The elimination of the variables relied on 2 different type of considerations:

* Elimination by Principal Feature Analysis
* Explained Variance

## Principal Feature Analysis

After the 1000 iterations of PFA, the following are the frequency of each variable being in the “significant” variables list:



## Removed Features

Note: Some of the features have been kept despite being rated low importance by PFA

![Removed Variables](data:application/pdf;base64,)

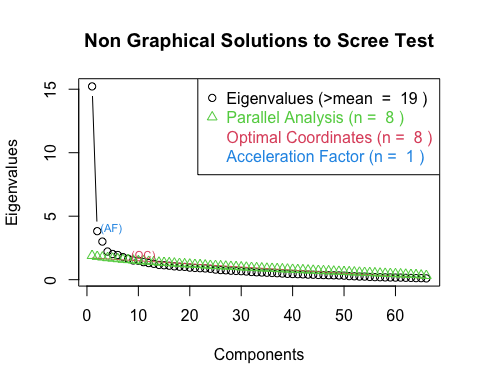
Removed Variables

# Model Approach Considerations

## Factor analysis

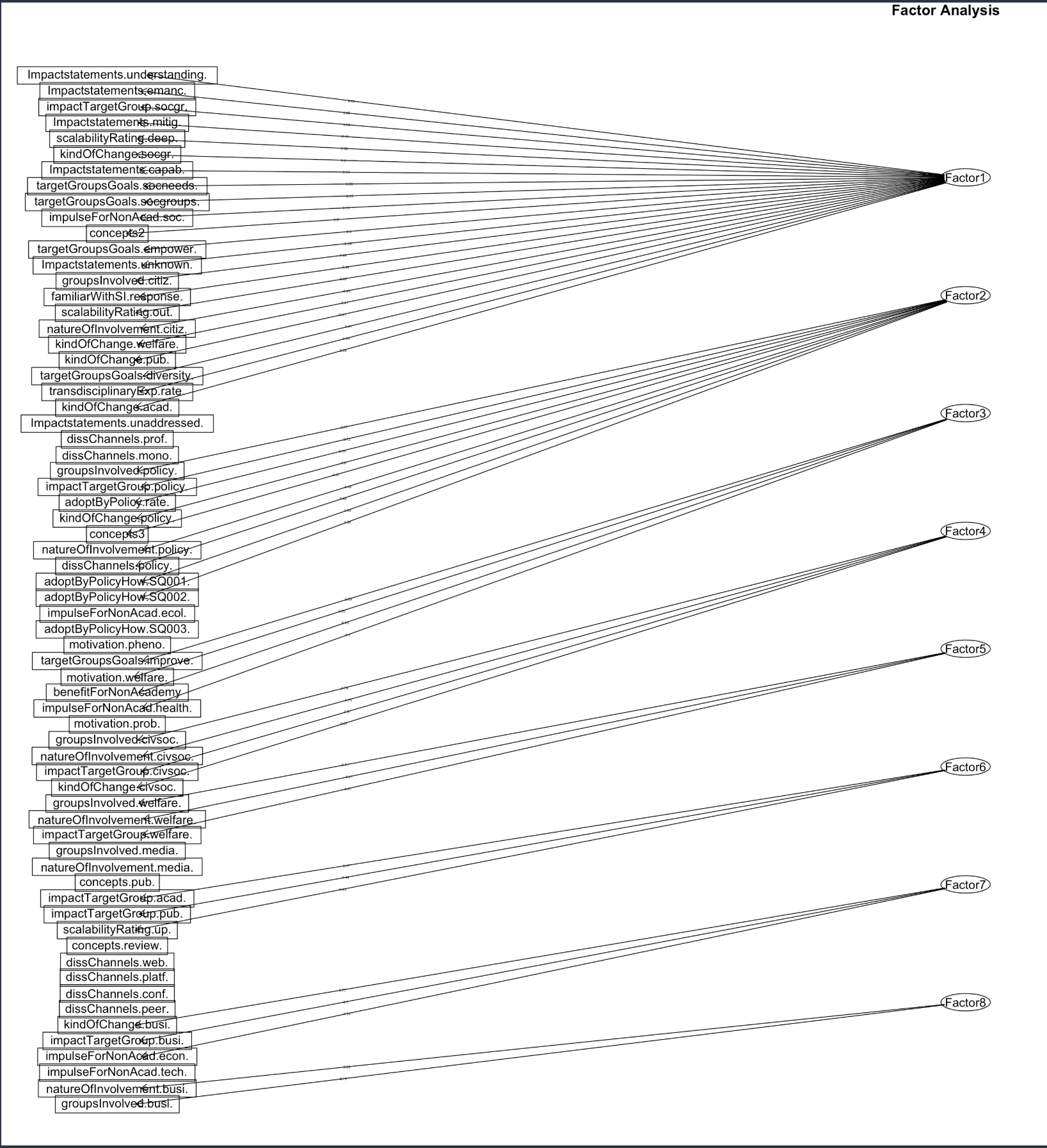
### Scree Plot

Determine Number of Factors to Extract

 The optimal number of factors is 8

## Exploratory Factor Analysis

##   
## Call:  
## factanal(x = df\_red, factors = 8, rotation = "varimax")  
##   
## Uniquenesses:  
## transdisciplinaryExp.rate. familiarWithSI.response.   
## 0.75 0.66   
## motivation.pheno. motivation.prob.   
## 0.95 0.90   
## motivation.welfare. benefitForNonAcademy   
## 0.39 0.32   
## impulseForNonAcad.soc. impulseForNonAcad.econ.   
## 0.54 0.77   
## impulseForNonAcad.ecol. impulseForNonAcad.health.   
## 0.83 0.63   
## impulseForNonAcad.tech. groupsInvolved.busi.   
## 0.92 0.25   
## groupsInvolved.civsoc. groupsInvolved.policy.   
## 0.20 0.24   
## groupsInvolved.citiz. groupsInvolved.media.   
## 0.52 0.76   
## groupsInvolved.welfare. natureOfInvolvement.busi.   
## 0.33 0.19   
## natureOfInvolvement.civsoc. natureOfInvolvement.policy.   
## 0.37 0.60   
## natureOfInvolvement.citiz. natureOfInvolvement.media.   
## 0.64 0.90   
## natureOfInvolvement.welfare. targetGroupsGoals.socneeds.   
## 0.43 0.51   
## targetGroupsGoals.socgroups. targetGroupsGoals.improve.   
## 0.57 0.40   
## targetGroupsGoals.empower. targetGroupsGoals.diversity.   
## 0.50 0.64   
## concepts.pub. concepts.review.   
## 0.94 0.88   
## concepts2 concepts3   
## 0.65 0.52   
## impactTargetGroup.pub. impactTargetGroup.busi.   
## 0.35 0.22   
## impactTargetGroup.socgr. impactTargetGroup.welfare.   
## 0.45 0.45   
## impactTargetGroup.civsoc. impactTargetGroup.policy.   
## 0.42 0.27   
## impactTargetGroup.acad. kindOfChange.pub.   
## 0.72 0.66   
## kindOfChange.busi. kindOfChange.socgr.   
## 0.34 0.59   
## kindOfChange.welfare. kindOfChange.civsoc.   
## 0.58 0.65   
## kindOfChange.policy. kindOfChange.acad.   
## 0.47 0.76   
## adoptByPolicy.rate. adoptByPolicyHow.SQ001.   
## 0.36 0.75   
## adoptByPolicyHow.SQ002. adoptByPolicyHow.SQ003.   
## 0.82 0.88   
## Impactstatements.capab. Impactstatements.emanc.   
## 0.45 0.42   
## Impactstatements.understanding. Impactstatements.mitig.   
## 0.44 0.44   
## Impactstatements.unknown. Impactstatements.unaddressed.   
## 0.62 0.80   
## dissChannels.peer. dissChannels.mono.   
## 0.96 0.83   
## dissChannels.conf. dissChannels.policy.   
## 0.97 0.75   
## dissChannels.prof. dissChannels.web.   
## 0.75 0.92   
## dissChannels.platf. scalabilityRating.up.   
## 0.96 0.45   
## scalabilityRating.out. scalabilityRating.deep.   
## 0.43 0.33   
##   
## Loadings:  
## Factor1 Factor2 Factor3 Factor4 Factor5 Factor6  
## impulseForNonAcad.soc. 0.53   
## targetGroupsGoals.socneeds. 0.55   
## targetGroupsGoals.socgroups. 0.55   
## concepts2 0.50   
## impactTargetGroup.socgr. 0.65   
## kindOfChange.socgr. 0.60   
## Impactstatements.capab. 0.55   
## Impactstatements.emanc. 0.65   
## Impactstatements.understanding. 0.66 0.32   
## Impactstatements.mitig. 0.63 0.32   
## scalabilityRating.deep. 0.62 0.38 0.30   
## groupsInvolved.policy. 0.77   
## concepts3 0.57   
## impactTargetGroup.policy. 0.34 0.72   
## kindOfChange.policy. 0.38 0.60   
## adoptByPolicy.rate. 0.35 0.69   
## motivation.welfare. 0.37 0.65   
## benefitForNonAcademy 0.37 0.65   
## impulseForNonAcad.health. 0.50   
## targetGroupsGoals.improve. 0.69   
## groupsInvolved.civsoc. 0.30 0.78   
## natureOfInvolvement.civsoc. 0.75   
## impactTargetGroup.civsoc. 0.40 0.33 0.51   
## groupsInvolved.welfare. 0.30 0.71   
## natureOfInvolvement.welfare. 0.39 0.61   
## impactTargetGroup.busi. 0.38   
## kindOfChange.busi.   
## groupsInvolved.busi.   
## natureOfInvolvement.busi.   
## transdisciplinaryExp.rate. 0.38   
## familiarWithSI.response. 0.46   
## motivation.pheno.   
## motivation.prob.   
## impulseForNonAcad.econ.   
## impulseForNonAcad.ecol.   
## impulseForNonAcad.tech.   
## groupsInvolved.citiz. 0.49 0.35   
## groupsInvolved.media.   
## natureOfInvolvement.policy. 0.49   
## natureOfInvolvement.citiz. 0.45 0.34   
## natureOfInvolvement.media.   
## targetGroupsGoals.empower. 0.50   
## targetGroupsGoals.diversity. 0.41   
## concepts.pub.   
## concepts.review.   
## impactTargetGroup.pub. 0.37 0.41 0.44   
## impactTargetGroup.welfare. 0.39 0.41 0.37   
## impactTargetGroup.acad. 0.47   
## kindOfChange.pub. 0.41   
## kindOfChange.welfare. 0.41 0.41   
## kindOfChange.civsoc. 0.34 0.37   
## kindOfChange.acad. 0.38   
## adoptByPolicyHow.SQ001. 0.39   
## adoptByPolicyHow.SQ002. 0.36   
## adoptByPolicyHow.SQ003.   
## Impactstatements.unknown. 0.49 0.32   
## Impactstatements.unaddressed.   
## dissChannels.peer.   
## dissChannels.mono.   
## dissChannels.conf.   
## dissChannels.policy. 0.44   
## dissChannels.prof.   
## dissChannels.web.   
## dissChannels.platf.   
## scalabilityRating.up. 0.34 0.33 0.43   
## scalabilityRating.out. 0.46 0.37 0.36   
## Factor7 Factor8  
## impulseForNonAcad.soc.   
## targetGroupsGoals.socneeds.   
## targetGroupsGoals.socgroups.   
## concepts2   
## impactTargetGroup.socgr.   
## kindOfChange.socgr.   
## Impactstatements.capab.   
## Impactstatements.emanc.   
## Impactstatements.understanding.   
## Impactstatements.mitig.   
## scalabilityRating.deep.   
## groupsInvolved.policy.   
## concepts3   
## impactTargetGroup.policy.   
## kindOfChange.policy.   
## adoptByPolicy.rate.   
## motivation.welfare.   
## benefitForNonAcademy   
## impulseForNonAcad.health.   
## targetGroupsGoals.improve.   
## groupsInvolved.civsoc.   
## natureOfInvolvement.civsoc.   
## impactTargetGroup.civsoc.   
## groupsInvolved.welfare.   
## natureOfInvolvement.welfare.   
## impactTargetGroup.busi. 0.70 0.31   
## kindOfChange.busi. 0.77   
## groupsInvolved.busi. 0.79   
## natureOfInvolvement.busi. 0.86   
## transdisciplinaryExp.rate.   
## familiarWithSI.response.   
## motivation.pheno.   
## motivation.prob.   
## impulseForNonAcad.econ. 0.34   
## impulseForNonAcad.ecol.   
## impulseForNonAcad.tech.   
## groupsInvolved.citiz.   
## groupsInvolved.media.   
## natureOfInvolvement.policy.   
## natureOfInvolvement.citiz.   
## natureOfInvolvement.media.   
## targetGroupsGoals.empower.   
## targetGroupsGoals.diversity.   
## concepts.pub.   
## concepts.review.   
## impactTargetGroup.pub.   
## impactTargetGroup.welfare.   
## impactTargetGroup.acad.   
## kindOfChange.pub. 0.30   
## kindOfChange.welfare.   
## kindOfChange.civsoc.   
## kindOfChange.acad.   
## adoptByPolicyHow.SQ001.   
## adoptByPolicyHow.SQ002.   
## adoptByPolicyHow.SQ003.   
## Impactstatements.unknown.   
## Impactstatements.unaddressed.   
## dissChannels.peer.   
## dissChannels.mono.   
## dissChannels.conf.   
## dissChannels.policy.   
## dissChannels.prof.   
## dissChannels.web.   
## dissChannels.platf.   
## scalabilityRating.up.   
## scalabilityRating.out.   
##   
## Factor1 Factor2 Factor3 Factor4 Factor5 Factor6 Factor7 Factor8  
## SS loadings 8.37 5.15 2.68 2.57 2.29 2.10 1.98 1.89  
## Proportion Var 0.13 0.08 0.04 0.04 0.03 0.03 0.03 0.03  
## Cumulative Var 0.13 0.20 0.25 0.28 0.32 0.35 0.38 0.41  
##   
## Test of the hypothesis that 8 factors are sufficient.  
## The chi square statistic is 3587.36 on 1645 degrees of freedom.  
## The p-value is 6.28e-146



EFA Factors

### Confirmatory Factory Analysis (Theory driven model)

The final model structure to be fed into the confirmatory factor analysis has been decided with the consideration of both the results of the exploratory factor analysis and the initial theory driven structure presented above.

Model structure: ![CFA Model, Factors 1-3](data:application/pdf;base64,) ![CFA Model, Factors 4-6](data:application/pdf;base64,) ![CFA Model, Factors 7-8](data:application/pdf;base64,)

Model evaluation:

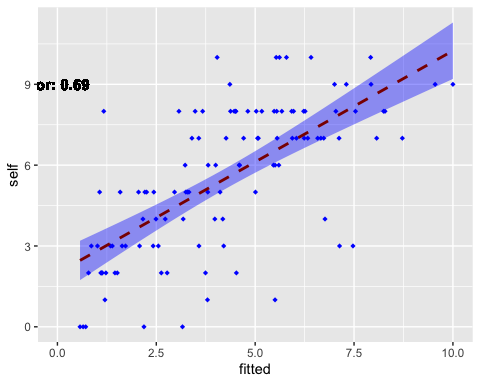
## lavaan 0.6-11 ended normally after 247 iterations  
##   
## Estimator ML  
## Optimization method NLMINB  
## Number of model parameters 126  
##   
## Number of observations 361  
##   
## Model Test User Model:  
##   
## Test statistic 3688.183  
## Degrees of freedom 909  
## P-value (Chi-square) 0.000  
##   
## Model Test Baseline Model:  
##   
## Test statistic 9363.946  
## Degrees of freedom 990  
## P-value 0.000  
##   
## User Model versus Baseline Model:  
##   
## Comparative Fit Index (CFI) 0.668  
## Tucker-Lewis Index (TLI) 0.639  
##   
## Loglikelihood and Information Criteria:  
##   
## Loglikelihood user model (H0) -21230.573  
## Loglikelihood unrestricted model (H1) -19386.481  
##   
## Akaike (AIC) 42713.145  
## Bayesian (BIC) 43203.144  
## Sample-size adjusted Bayesian (BIC) 42803.405  
##   
## Root Mean Square Error of Approximation:  
##   
## RMSEA 0.092  
## 90 Percent confidence interval - lower 0.089  
## 90 Percent confidence interval - upper 0.095  
## P-value RMSEA <= 0.05 0.000  
##   
## Standardized Root Mean Square Residual:  
##   
## SRMR 0.086  
##   
## Parameter Estimates:  
##   
## Standard errors Standard  
## Information Expected  
## Information saturated (h1) model Structured  
##   
## Latent Variables:  
## Estimate Std.Err z-value P(>|z|) Std.lv  
## fam =~   
## fmlrWthSI.rsp. 1.000 2.155  
## trnsdscplnrE.. 0.772 0.096 8.024 0.000 1.663  
## ia\_human\_condition =~   
## motivatn.wlfr. 1.000 2.567  
## benftFrNnAcdmy 0.263 0.017 15.427 0.000 0.674  
## implsFrNnAcd.. 0.058 0.010 6.049 0.000 0.148  
## trgtGrpsGls.m. 0.149 0.011 14.051 0.000 0.382  
## implsFrNnAcd.. 0.054 0.010 5.240 0.000 0.138  
## implsFrNnAcd.. 0.002 0.008 0.305 0.760 0.006  
## ia\_non\_academic =~   
## implsFrNnAcd.. 1.000 NA  
## implsFrNnAcd.. 0.371 0.200 1.853 0.064 NA  
## transdisciplinary\_social =~   
## grpsInvlvd.ct. 1.000 0.432  
## grpsInvlvd.cv. 0.680 0.067 10.125 0.000 0.294  
## grpsInvlvd.wl. 0.844 0.082 10.308 0.000 0.365  
## ntrOfInvlvmn.. 0.733 0.076 9.691 0.000 0.316  
## ntrOfInvlvmn.. 0.415 0.054 7.682 0.000 0.179  
## ntrOfInvlvmn.. 0.768 0.079 9.750 0.000 0.332  
## trgtGrpsGls.s. 0.602 0.054 11.179 0.000 0.260  
## trgtGrpsGls.s. 0.508 0.047 10.913 0.000 0.219  
## trgtGrpsGls.m. 0.714 0.060 11.991 0.000 0.308  
## trgtGrpsGls.d. 0.637 0.063 10.184 0.000 0.275  
## outcome\_public =~   
## impctTrgtGrp.. 1.000 1.878  
## impctTrgtGrp.. 1.032 0.093 11.089 0.000 1.938  
## impctTrgtGrp.. 0.977 0.098 10.014 0.000 1.835  
## impctTrgtGrp.. 0.711 0.074 9.615 0.000 1.335  
## kindOfChng.pb. 0.153 0.023 6.738 0.000 0.288  
## kndOfChng.scg. 0.221 0.024 9.317 0.000 0.414  
## kndOfChng.wlf. 0.221 0.024 9.120 0.000 0.416  
## kndOfChng.cvs. 0.166 0.020 8.312 0.000 0.312  
## outcome\_statement =~   
## Impctsttmnts.. 1.000 2.319  
## Impctsttmnts.. 0.843 0.059 14.297 0.000 1.954  
## Impctsttmnts.. 1.105 0.082 13.448 0.000 2.563  
## Impctsttmnts.. 0.774 0.056 13.699 0.000 1.795  
## Impctsttmnts.. 0.939 0.085 11.094 0.000 2.179  
## Impctsttmnts.. 0.660 0.089 7.418 0.000 1.532  
## scale =~   
## sclbltyRtng.p. 1.000 2.917  
## sclbltyRtng.t. 0.973 0.067 14.444 0.000 2.838  
## sclbltyRtng.d. 0.877 0.058 15.067 0.000 2.557  
## policy =~   
## grpsInvlvd.pl. 1.000 0.455  
## impctTrgtGrp.. 5.984 0.394 15.185 0.000 2.725  
## kndOfChng.plc. 1.460 0.113 12.894 0.000 0.665  
## ntrOfInvlvmn.. 0.786 0.096 8.195 0.000 0.358  
## adptBPH.SQ001. 0.280 0.034 8.118 0.000 0.127  
## busi =~   
## grpsInvlvd.bs. 1.000 0.336  
## impctTrgtGrp.. 7.811 0.792 9.858 0.000 2.628  
## kindOfChng.bs. 1.618 0.164 9.852 0.000 0.544  
## Std.all  
##   
## 0.717  
## 0.545  
##   
## 0.753  
## 0.861  
## 0.338  
## 0.766  
## 0.294  
## 0.017  
##   
## NA  
## NA  
##   
## 0.668  
## 0.589  
## 0.601  
## 0.561  
## 0.438  
## 0.565  
## 0.658  
## 0.640  
## 0.713  
## 0.593  
##   
## 0.603  
## 0.742  
## 0.644  
## 0.610  
## 0.398  
## 0.586  
## 0.570  
## 0.508  
##   
## 0.735  
## 0.768  
## 0.724  
## 0.737  
## 0.602  
## 0.407  
##   
## 0.748  
## 0.787  
## 0.823  
##   
## 0.721  
## 0.884  
## 0.724  
## 0.459  
## 0.454  
##   
## 0.550  
## 0.930  
## 0.718  
##   
## Covariances:  
## Estimate Std.Err z-value P(>|z|) Std.lv  
## fam ~~   
## ia\_human\_cndtn 3.086 0.474 6.503 0.000 0.558  
## ia\_non\_academc 0.076 0.039 1.958 0.050 0.518  
## trnsdscplnry\_s 0.634 0.088 7.247 0.000 0.682  
## outcome\_public 2.984 0.414 7.208 0.000 0.737  
## outcome\_sttmnt 3.828 0.476 8.041 0.000 0.766  
## scale 4.084 0.566 7.210 0.000 0.650  
## policy 0.545 0.085 6.443 0.000 0.556  
## busi 0.260 0.060 4.331 0.000 0.358  
## ia\_human\_condition ~~   
## ia\_non\_academc 0.070 0.039 1.799 0.072 0.398  
## trnsdscplnry\_s 0.728 0.095 7.662 0.000 0.657  
## outcome\_public 3.339 0.447 7.465 0.000 0.693  
## outcome\_sttmnt 3.542 0.473 7.494 0.000 0.595  
## scale 4.601 0.604 7.620 0.000 0.614  
## policy 0.591 0.088 6.703 0.000 0.505  
## busi 0.265 0.061 4.377 0.000 0.307  
## ia\_non\_academic ~~   
## trnsdscplnry\_s 0.001 0.006 0.083 0.934 0.018  
## outcome\_public 0.038 0.029 1.328 0.184 0.299  
## outcome\_sttmnt 0.107 0.036 3.004 0.003 0.678  
## scale 0.124 0.045 2.756 0.006 0.625  
## policy 0.032 0.007 4.383 0.000 1.022  
## busi 0.030 0.006 5.053 0.000 1.314  
## transdisciplinary\_social ~~   
## outcome\_public 0.701 0.089 7.851 0.000 0.864  
## outcome\_sttmnt 0.836 0.098 8.539 0.000 0.835  
## scale 0.766 0.104 7.328 0.000 0.608  
## policy 0.119 0.016 7.251 0.000 0.604  
## busi 0.032 0.010 3.318 0.001 0.218  
## outcome\_public ~~   
## outcome\_sttmnt 3.630 0.451 8.053 0.000 0.833  
## scale 4.135 0.534 7.738 0.000 0.755  
## policy 0.565 0.078 7.219 0.000 0.660  
## busi 0.177 0.045 3.932 0.000 0.279  
## outcome\_statement ~~   
## scale 5.214 0.605 8.612 0.000 0.771  
## policy 0.774 0.093 8.287 0.000 0.733  
## busi 0.258 0.056 4.621 0.000 0.331  
## scale ~~   
## policy 0.935 0.115 8.114 0.000 0.704  
## busi 0.448 0.079 5.657 0.000 0.456  
## policy ~~   
## busi 0.047 0.011 4.362 0.000 0.306  
## Std.all  
##   
## 0.558  
## 0.518  
## 0.682  
## 0.737  
## 0.766  
## 0.650  
## 0.556  
## 0.358  
##   
## 0.398  
## 0.657  
## 0.693  
## 0.595  
## 0.614  
## 0.505  
## 0.307  
##   
## 0.018  
## 0.299  
## 0.678  
## 0.625  
## 1.022  
## 1.314  
##   
## 0.864  
## 0.835  
## 0.608  
## 0.604  
## 0.218  
##   
## 0.833  
## 0.755  
## 0.660  
## 0.279  
##   
## 0.771  
## 0.733  
## 0.331  
##   
## 0.704  
## 0.456  
##   
## 0.306  
##   
## Variances:  
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all  
## .fmlrWthSI.rsp. 4.393 0.614 7.149 0.000 4.393 0.486  
## .trnsdscplnrE.. 6.554 0.578 11.341 0.000 6.554 0.703  
## .motivatn.wlfr. 5.032 0.472 10.670 0.000 5.032 0.433  
## .benftFrNnAcdmy 0.158 0.021 7.445 0.000 0.158 0.258  
## .implsFrNnAcd.. 0.171 0.013 13.178 0.000 0.171 0.886  
## .trgtGrpsGls.m. 0.103 0.010 10.417 0.000 0.103 0.413  
## .implsFrNnAcd.. 0.201 0.015 13.248 0.000 0.201 0.914  
## .implsFrNnAcd.. 0.125 0.009 13.434 0.000 0.125 1.000  
## .implsFrNnAcd.. 0.079 0.017 4.502 0.000 0.079 1.063  
## .implsFrNnAcd.. 0.157 0.012 13.190 0.000 0.157 1.004  
## .grpsInvlvd.ct. 0.231 0.019 12.226 0.000 0.231 0.553  
## .grpsInvlvd.cv. 0.162 0.013 12.642 0.000 0.162 0.653  
## .grpsInvlvd.wl. 0.235 0.019 12.592 0.000 0.235 0.639  
## .ntrOfInvlvmn.. 0.217 0.017 12.749 0.000 0.217 0.685  
## .ntrOfInvlvmn.. 0.135 0.010 13.083 0.000 0.135 0.808  
## .ntrOfInvlvmn.. 0.235 0.018 12.736 0.000 0.235 0.681  
## .trgtGrpsGls.s. 0.089 0.007 12.292 0.000 0.089 0.567  
## .trgtGrpsGls.s. 0.069 0.006 12.396 0.000 0.069 0.590  
## .trgtGrpsGls.m. 0.092 0.008 11.880 0.000 0.092 0.492  
## .trgtGrpsGls.d. 0.139 0.011 12.626 0.000 0.139 0.648  
## .impctTrgtGrp.. 6.163 0.493 12.504 0.000 6.163 0.636  
## .impctTrgtGrp.. 3.060 0.269 11.375 0.000 3.060 0.449  
## .impctTrgtGrp.. 4.762 0.388 12.278 0.000 4.762 0.586  
## .impctTrgtGrp.. 3.010 0.241 12.470 0.000 3.010 0.628  
## .kindOfChng.pb. 0.439 0.033 13.134 0.000 0.439 0.842  
## .kndOfChng.scg. 0.329 0.026 12.588 0.000 0.329 0.657  
## .kndOfChng.wlf. 0.359 0.028 12.656 0.000 0.359 0.675  
## .kndOfChng.cvs. 0.279 0.022 12.874 0.000 0.279 0.742  
## .Impctsttmnts.. 4.565 0.390 11.715 0.000 4.565 0.459  
## .Impctsttmnts.. 2.652 0.234 11.315 0.000 2.652 0.410  
## .Impctsttmnts.. 5.945 0.503 11.826 0.000 5.945 0.475  
## .Impctsttmnts.. 2.702 0.231 11.695 0.000 2.702 0.456  
## .Impctsttmnts.. 8.340 0.661 12.619 0.000 8.340 0.637  
## .Impctsttmnts.. 11.829 0.899 13.153 0.000 11.829 0.834  
## .sclbltyRtng.p. 6.691 0.611 10.952 0.000 6.691 0.440  
## .sclbltyRtng.t. 4.951 0.484 10.226 0.000 4.951 0.381  
## .sclbltyRtng.d. 3.105 0.336 9.249 0.000 3.105 0.322  
## .grpsInvlvd.pl. 0.192 0.017 11.394 0.000 0.192 0.480  
## .impctTrgtGrp.. 2.072 0.304 6.826 0.000 2.072 0.218  
## .kndOfChng.plc. 0.402 0.035 11.360 0.000 0.402 0.476  
## .ntrOfInvlvmn.. 0.481 0.037 12.957 0.000 0.481 0.790  
## .adptBPH.SQ001. 0.062 0.005 12.969 0.000 0.062 0.793  
## .grpsInvlvd.bs. 0.261 0.021 12.423 0.000 0.261 0.698  
## .impctTrgtGrp.. 1.077 0.431 2.502 0.012 1.077 0.135  
## .kindOfChng.bs. 0.278 0.028 9.985 0.000 0.278 0.484  
## fam 4.643 0.785 5.915 0.000 1.000 1.000  
## ia\_human\_cndtn 6.591 0.831 7.933 0.000 1.000 1.000  
## ia\_non\_academc -0.005 0.016 -0.285 0.775 NA NA  
## trnsdscplnry\_s 0.186 0.027 6.894 0.000 1.000 1.000  
## outcome\_public 3.528 0.585 6.030 0.000 1.000 1.000  
## outcome\_sttmnt 5.380 0.685 7.857 0.000 1.000 1.000  
## scale 8.506 1.076 7.909 0.000 1.000 1.000  
## policy 0.207 0.028 7.534 0.000 1.000 1.000  
## busi 0.113 0.022 5.260 0.000 1.000 1.000

**Observations:**

* Goodness of fit, Chi-Squared p value is very small (0.000)
* CFI and TFI are questionable but not too low (~0.65), normailly expected ~0.9
* RMSEA is surprisingly high (0.092) and stat. significant (0.000), the values I’ve seen so far were always ~0.05 and rarely significant
* SRMR is high (0.086), indication of a good fitting model.
* P values of the loadings are almost too good other than a couple of variables (to be addressed)
* Covariances are to be discussed
* Variance estimates are to be discussed (e.g. ia\_non:academic has very low variance -0.0005, what does it indicate)

# Model Output

## Correlation between the *self assessment SI-Rate* and the prediction



# Challenges Ahead

1. How to reason the legitimacy of the model?
2. How/if should we reduce the model to its most important elements?
3. How to describe the model numerically?
4. Should we also go for “prediction”?