Successuful Aging

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09 de abril de 2016

- Preparing new analysis
- Loading required packages
- Preparing all data
- Selecting only working variables
- Variables Summary - Descriptive Stats

All files used here are availible in a public repository licensed under MIT Licences and accessible by the following url:

https://github.com/crepeia/saging (https://github.com/crepeia/saging)

Preparing new analysis

Loading required packages

Preparing all data

```
#Setting Directory
setwd("~/successful_aging")

#Importing SPSS file .sav
base.dat <- read.spss("Base.sav", to.data.frame = T, use.missings = T)
```

Selecting only working variables

```
saging <- base.dat[ ,c(3,6:27)]

#Only 2 two guys are drinking everyday "consalco"

saging <- base.dat[ ,c(2,4,5,6,7,8,9,3,10:27)]

#As dataframe
saging<-as.data.frame(saging)

#As factor

saging[,c(1)]<-as.factor(saging[,c(1)])
saging[,c(2)]<-as.factor(saging[,c(2)])
saging[,c(3)]<-as.factor(saging[,c(3)])
saging[,c(4)]<-as.factor(saging[,c(4)])
saging[,c(5)]<-as.factor(saging[,c(5)])
saging[,c(6)]<-as.factor(saging[,c(6)])
saging[,c(7)]<-as.factor(saging[,c(7)])

saging<-as.data.frame(saging)

#As numeric
for (i in c(7:26)) {
saging[,c(i)]<-as.numeric(saging[,c(i)])
}
```

Variables Summary - Descriptive Stats

```
#Status Social Economic - Variables

##Descriptive
describe(saging)
```

```
## saging
##
##  26  Variables      303  Observations
## ---------------------------------------------------------------------------
## sexo
##       n missing  unique
##     303       0       2
##
## 1 (73, 24%), 2 (230, 76%)
## ---------------------------------------------------------------------------
## escol
##       n missing  unique
##     303       0       5
##
```

```
##            1   2  3  4  5
## Frequency 66 130 31 38 38
## %         22  43 10 13 13
## ------------------------------------------------------------------------
## estcivil
##       n missing  unique
##     303       0       5
##
##             1  2  3   4 5
## Frequency 123 35 26 114 5
## %          41 12  9  38 2
## ------------------------------------------------------------------------
## autosaude
##       n missing  unique
##     303       0       5
##
##            1   2   3 4 5
## Frequency 56 115 118 9 5
## %         18  38  39 3 2
## ------------------------------------------------------------------------
## constab
##       n missing  unique
##     303       0       3
##
## 1 (23, 8%), 2 (75, 25%), 3 (205, 68%)
## ------------------------------------------------------------------------
## consalco
##       n missing  unique
##     303       0       3
##
## 1 (251, 83%), 2 (50, 17%), 3 (2, 1%)
## ------------------------------------------------------------------------
## consfrveg
##       n missing  unique    Info    Mean
##     303       0       4    0.67   1.389
##
## 1 (206, 68%), 2 (77, 25%), 3 (19, 6%), 4 (1, 0%)
## ------------------------------------------------------------------------
## idade
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      32       1   70.79    61.0    62.0    65.0    70.0
##     .75     .90     .95
##    75.0    82.0    85.9
##
## lowest : 60 61 62 63 64, highest: 87 88 89 91 99
## ------------------------------------------------------------------------
## meemtotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      16    0.99   25.93      20      22      24      27
##     .75     .90     .95
##      28      29      30
```

```
##
##           14 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
## Frequency  2  1  2  1  5  6 13 15 14 24 34 26 44 55 40 21
## %          1  0  1  0  2  2  4  5  5  8 11  9 15 18 13  7
## ------------------------------------------------------------------------
## voctotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      47       1   22.51     8.1    11.0    15.0    22.0
##     .75     .90     .95
##    29.0    35.8    42.0
##
## lowest :  1  2  4  6  7, highest: 45 46 47 48 50
## ------------------------------------------------------------------------
## rmtotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      25    0.99   7.079     1.0     2.2     4.0     6.0
##     .75     .90     .95
##     8.0    15.0    19.0
##
## lowest :  0  1  2  3  4, highest: 20 21 22 23 24
## ------------------------------------------------------------------------
## esvtotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      24    0.98   29.91      20      23      27      31
##     .75     .90     .95
##      34      35      35
##
## lowest :  6 10 12 13 14, highest: 31 32 33 34 35
## ------------------------------------------------------------------------
## partidtotal
##       n missing  unique    Info    Mean
##     303       0       6     0.9   1.086
##
##             0   1  2  3 4 5
## Frequency 105 112 50 29 5 2
## %          35  37 17 10 2 1
## ------------------------------------------------------------------------
## eaertotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      19    0.99   32.24      26      27      29      32
##     .75     .90     .95
##      35      38      39
##
##           19 22 23 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
## Frequency  1  1  2  7  7 17 15 27 40 20 27 17 32 24 15 18 15  5 13
## %          0  0  1  2  2  6  5  9 13  7  9  6 11  8  5  6  5  2  4
## ------------------------------------------------------------------------
## qsvpresenca
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      23    0.99   29.54      21      23      27      30
##     .75     .90     .95
```

```
##      34      35      35
##
## lowest : 10 13 14 16 17, highest: 31 32 33 34 35
## ------------------------------------------------------------------------
## qsvbusca
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      31       1   22.18     5.0     8.2    14.5    24.0
##     .75     .90     .95
##    30.0    34.0    35.0
##
## lowest :  5  6  7  8  9, highest: 31 32 33 34 35
## ------------------------------------------------------------------------
## qsvtotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      40       1   51.73    37.1    40.0    45.0    52.0
##     .75     .90     .95
##    59.0    64.0    67.0
##
## lowest : 24 30 31 34 35, highest: 66 67 68 69 70
## ------------------------------------------------------------------------
## qpdtotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      11    0.97   3.568       1       1       2       3
##     .75     .90     .95
##       5       6       7
##
##           0  1  2  3  4  5  6  7 8 9 13
## Frequency 5 42 50 58 57 47 19 19 3 2  1
## %         2 14 17 19 19 16  6  6 1 1  0
## ------------------------------------------------------------------------
## asspтotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      12    0.96   17.26      12      13      15      18
##     .75     .90     .95
##      20      20      20
##
##           8 10 11 12 13 14 15 16 17 18 19 20
## Frequency 1  4  8  7 12 16 30 32 20 54 23 96
## %         0  1  3  2  4  5 10 11  7 18  8 32
## ------------------------------------------------------------------------
## aivdptotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      13    0.58  0.8911     0.0     0.0     0.0     0.0
##     .75     .90     .95
##     0.5     2.8     5.0
##
##             0  1  2 3 4 5 6 7 8 9 11 17 18
## Frequency 227 25 20 6 6 5 3 3 1 3  1  1  2
## %          75  8  7 2 2 2 1 1 0 1  0  0  1
## ------------------------------------------------------------------------
## gdstotal
```

```
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      13    0.98    3.29       0       1       2       3
##     .75     .90     .95
##       4       6       7
##
##            0  1  2  3  4  5  6 7 8 9 11 13 14
## Frequency 23 40 62 56 47 34 20 8 3 5  2  2  1
## %          8 13 20 18 16 11  7 3 1 2  1  1  0
## ------------------------------------------------------------------------
## qcspatotal
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      14    0.98   5.624       2       3       4       5
##     .75     .90     .95
##       7       8       9
##
##           0 1  2  3  4  5  6  7  8  9 10 11 12 14
## Frequency 2 2 15 28 56 53 41 49 32 11  7  3  2  2
## %         1 1  5  9 18 17 14 16 11  4  2  1  1  1
## ------------------------------------------------------------------------
## X.3dwscogAFC
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      26       1   2.726   1.571   1.857   2.286   2.714
##     .75     .90     .95
##   3.286   3.829   4.000
##
## lowest : 1.000 1.143 1.286 1.571 1.714
## highest: 4.143 4.286 4.429 4.571 4.857
## ------------------------------------------------------------------------
## X.3dwsafeAFC
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      15    0.98   4.045    2.50    3.00    3.50    4.25
##     .75     .90     .95
##    4.75    5.00    5.00
##
##           1 1.5 2 2.25 2.5 2.75  3 3.25 3.5 3.75  4 4.25 4.5 4.75  5
## Frequency 2   1 9    1   4    8 13   19  32   16 37   48  31   17 65
## %         1   0 3    0   1    3  4    6  11    5 12   16  10    6 21
## ------------------------------------------------------------------------
## X.3dwsrefAFC
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0      24       1   3.162   1.667   2.000   2.500   3.167
##     .75     .90     .95
##   3.833   4.333   4.500
##
## lowest : 1.000 1.167 1.333 1.500 1.667
## highest: 4.167 4.333 4.500 4.667 5.000
## ------------------------------------------------------------------------
## X.3dwstotalAFC
##       n missing  unique    Info    Mean     .05     .10     .25     .50
##     303       0     241       1   3.311   2.240   2.460   2.944   3.365
##     .75     .90     .95
```

```
##   3.734   4.065   4.238
##
## lowest : 1.159 1.222 1.333 1.540 1.817
## highest: 4.500 4.508 4.603 4.698 4.841
## ------------------------------------------------------------------------------
```

```
summary(saging)
```

```
##  sexo    escol   estcivil autosaude constab consalco   consfrveg
##  1: 73   1: 66   1:123    1: 56     1: 23   1:251    Min.   :1.000
##  2:230   2:130   2: 35    2:115     2: 75   2: 50    1st Qu.:1.000
##          3: 31   3: 26    3:118     3:205   3:  2    Median :1.000
##          4: 38   4:114    4:  9                      Mean   :1.389
##          5: 38   5:  5    5:  5                      3rd Qu.:2.000
##                                                      Max.   :4.000
##       idade          meemtotal        voctotal        rmtotal
##  Min.   :60.00   Min.   :14.00   Min.   : 1.00   Min.   : 0.000
##  1st Qu.:65.00   1st Qu.:24.00   1st Qu.:15.00   1st Qu.: 4.000
##  Median :70.00   Median :27.00   Median :22.00   Median : 6.000
##  Mean   :70.79   Mean   :25.93   Mean   :22.51   Mean   : 7.079
##  3rd Qu.:75.00   3rd Qu.:28.00   3rd Qu.:29.00   3rd Qu.: 8.000
##  Max.   :99.00   Max.   :30.00   Max.   :50.00   Max.   :24.000
##     esvtotal       partidtotal      eaertotal       qsvpresenca
##  Min.   : 6.00   Min.   :0.000   Min.   :19.00   Min.   :10.00
##  1st Qu.:27.00   1st Qu.:0.000   1st Qu.:29.00   1st Qu.:27.00
##  Median :31.00   Median :1.000   Median :32.00   Median :30.00
##  Mean   :29.91   Mean   :1.086   Mean   :32.24   Mean   :29.54
##  3rd Qu.:34.00   3rd Qu.:2.000   3rd Qu.:35.00   3rd Qu.:34.00
##  Max.   :35.00   Max.   :5.000   Max.   :40.00   Max.   :35.00
##     qsvbusca        qsvtotal        qpdtotal        assptotal
##  Min.   : 5.00   Min.   :24.00   Min.   : 0.000   Min.   : 8.00
##  1st Qu.:14.50   1st Qu.:45.00   1st Qu.: 2.000   1st Qu.:15.00
##  Median :24.00   Median :52.00   Median : 3.000   Median :18.00
##  Mean   :22.18   Mean   :51.73   Mean   : 3.568   Mean   :17.26
##  3rd Qu.:30.00   3rd Qu.:59.00   3rd Qu.: 5.000   3rd Qu.:20.00
##  Max.   :35.00   Max.   :70.00   Max.   :13.000   Max.   :20.00
##    aivdptotal         gdstotal       qcspatotal      X.3dwscogAFC
##  Min.   : 0.0000   Min.   : 0.00   Min.   : 0.000   Min.   :1.000
##  1st Qu.: 0.0000   1st Qu.: 2.00   1st Qu.: 4.000   1st Qu.:2.286
##  Median : 0.0000   Median : 3.00   Median : 5.000   Median :2.714
##  Mean   : 0.8911   Mean   : 3.29   Mean   : 5.624   Mean   :2.726
##  3rd Qu.: 0.5000   3rd Qu.: 4.00   3rd Qu.: 7.000   3rd Qu.:3.286
##  Max.   :18.0000   Max.   :14.00   Max.   :14.000   Max.   :4.857
##   X.3dwsafeAFC    X.3dwsrefAFC   X.3dwstotalAFC
##  Min.   :1.000   Min.   :1.000   Min.   :1.159
##  1st Qu.:3.500   1st Qu.:2.500   1st Qu.:2.944
##  Median :4.250   Median :3.167   Median :3.365
##  Mean   :4.045   Mean   :3.162   Mean   :3.311
##  3rd Qu.:4.750   3rd Qu.:3.833   3rd Qu.:3.734
##  Max.   :5.000   Max.   :5.000   Max.   :4.841
```

```
#Saging

#Saging - First Model

saging1 <- '

# measurement model
envels =~ meemtotal + gdstotal + esvtotal + autosaude + aivdptotal
intel =~ voctotal + rmtotal
sabed =~ X.3dwscogAFC + X.3dwsrefAFC + X.3dwsafeAFC
senti =~ qsvpresenca + qsvbusca

# regressions
envels ~ intel + sabed + senti
envels ~ qcspatotal



#correlations and residuals
intel ~~ sabed
sabed ~~ senti
intel ~~ senti
'

fitsaging1 <- sem(saging1, estimator="WLSMVS", mimic = "Mplus", data = saging,
        ordered=c("autosaude"))
```

```
## Found more than one class "Model" in cache; using the first, from namespace 'Mat
rixModels'
```

```
#Model Summary
summary(fitsaging1, standardized=T, fit.measures=T, rsquare=T)
```

```
## lavaan (0.5-20) converged normally after 220 iterations
##
##   Number of observations                           303
##
##   Estimator                                       DWLS      Robust
##   Minimum Function Test Statistic              381.525     272.039
##   Degrees of freedom                               59          31
##   P-value (Chi-square)                          0.000       0.000
##   Scaling correction factor                                 1.402
##     for the mean and variance adjusted correction (WLSMV)
##
## Model test baseline model:
##
##   Minimum Function Test Statistic            1087.595     405.701
##   Degrees of freedom                               78          29
```

```
##   P-value                                        0.000       0.000
##
## User model versus baseline model:
##
##   Comparative Fit Index (CFI)                    0.681       0.360
##   Tucker-Lewis Index (TLI)                       0.578       0.401
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                                          0.135       0.160
##   90 Percent Confidence Interval          0.122  0.148       0.146  0.175
##   P-value RMSEA <= 0.05                          0.000       0.000
##
## Weighted Root Mean Square Residual:
##
##   WRMR                                           1.915       1.915
##
## Parameter Estimates:
##
##   Information                                 Expected
##   Standard Errors                          Robust.sem
##
## Latent Variables:
##                   Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##   envels =~
##     meemtotal        1.000                               1.040    0.344
##     gdstotal        -1.402    0.287   -4.878    0.000   -1.457   -0.644
##     esvtotal         1.945    0.523    3.718    0.000    2.022    0.387
##     autosaude       -0.581    0.119   -4.869    0.000   -0.604   -0.590
##     aivdptotal      -0.586    0.155   -3.771    0.000   -0.609   -0.258
##   intel =~
##     voctotal         1.000                               7.609    0.797
##     rmtotal          0.375    0.086    4.337    0.000    2.851    0.592
##   sabed =~
##     X.3dwscogAFC     1.000                               0.291    0.407
##     X.3dwsrefAFC     2.903    0.589    4.929    0.000    0.846    0.969
##     X.3dwsafeAFC     1.180    0.252    4.686    0.000    0.344    0.422
##   senti =~
##     qsvpresenca      1.000                               2.187    0.453
##     qsvbusca        -2.125    0.470   -4.518    0.000   -4.647   -0.508
##
## Regressions:
##                   Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##   envels ~
##     intel            0.025    0.015    1.677    0.094    0.186    0.186
##     sabed            0.120    0.713    0.168    0.866    0.034    0.034
##     senti            0.286    0.121    2.367    0.018    0.602    0.602
##     qcspatotal       0.173    0.047    3.717    0.000    0.166    0.372
##
## Covariances:
##                   Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
```

```
##   intel ~~
##     sabed             1.023    0.273    3.751    0.000    0.461    0.461
##   sabed ~~
##     senti             0.410    0.106    3.885    0.000    0.643    0.643
##   intel ~~
##     senti             3.798    1.980    1.918    0.055    0.228    0.228
##
## Intercepts:
##                    Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##     meemtotal        24.287    0.489   49.623    0.000   24.287    8.031
##     gdstotal          4.987    0.343   14.527    0.000    4.987    2.205
##     esvtotal         29.846    0.814   36.669    0.000   29.846    5.708
##     autosaude         0.000                             0.000    0.000
##     aivdptotal        2.229    0.391    5.695    0.000    2.229    0.944
##     voctotal         16.050    1.658    9.679    0.000   16.050    1.682
##     rmtotal           4.288    0.790    5.429    0.000    4.288    0.890
##     X.3dwscogAFC      2.264    0.113   20.105    0.000    2.264    3.165
##     X.3dwsrefAFC      2.705    0.133   20.359    0.000    2.705    3.097
##     X.3dwsafeAFC      3.899    0.134   29.070    0.000    3.899    4.785
##     qsvpresenca      28.811    0.777   37.057    0.000   28.811    5.967
##     qsvbusca         23.085    1.417   16.290    0.000   23.085    2.524
##     envels            0.000                             0.000    0.000
##     intel             0.000                             0.000    0.000
##     sabed             0.000                             0.000    0.000
##     senti             0.000                             0.000    0.000
##
## Thresholds:
##                    Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##     autosaude|t1     -1.357    0.188   -7.218    0.000   -1.357   -1.324
##     autosaude|t2     -0.285    0.179   -1.594    0.111   -0.285   -0.278
##     autosaude|t3      1.269    0.183    6.917    0.000    1.269    1.238
##     autosaude|t4      1.734    0.223    7.790    0.000    1.734    1.692
##
## Variances:
##                    Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##     meemtotal         8.065    0.672   11.994    0.000    8.065    0.882
##     gdstotal          2.991    0.338    8.838    0.000    2.991    0.585
##     esvtotal         23.255    1.828   12.722    0.000   23.255    0.850
##     autosaude         0.685                             0.685    0.652
##     aivdptotal        5.205    0.249   20.918    0.000    5.205    0.933
##     voctotal         33.180   13.433    2.470    0.014   33.180    0.364
##     rmtotal          15.099    2.012    7.504    0.000   15.099    0.650
##     X.3dwscogAFC      0.427    0.039   10.953    0.000    0.427    0.834
##     X.3dwsrefAFC      0.047    0.096    0.487    0.626    0.047    0.061
##     X.3dwsafeAFC      0.546    0.048   11.332    0.000    0.546    0.822
##     qsvpresenca      18.530    1.708   10.846    0.000   18.530    0.795
##     qsvbusca         62.081    8.436    7.359    0.000   62.081    0.742
##     envels            0.412    0.217    1.901    0.057    0.381    0.381
##     intel            57.891   14.680    3.944    0.000    1.000    1.000
##     sabed             0.085    0.028    3.080    0.002    1.000    1.000
##     senti             4.782    1.476    3.239    0.001    1.000    1.000
```

```
##
## Scales y*:
##                    Estimate  Std.Err  Z-value  P(>|z|)   Std.lv  Std.all
##     autosaude         1.000                                1.000    1.000
##
## R-Square:
##                    Estimate
##     meemtotal         0.118
##     gdstotal          0.415
##     esvtotal          0.150
##     autosaude         0.348
##     aivdptotal        0.067
##     voctotal          0.636
##     rmtotal           0.350
##     X.3dwscogAFC      0.166
##     X.3dwsrefAFC      0.939
##     X.3dwsafeAFC      0.178
##     qsvpresenca       0.205
##     qsvbusca          0.258
##     envels            0.619
```

```
#Model Fit Measures
fitMeasures(fitsaging1, c("chisq","df","rmsea","rmsea.ci.lower", "rmsea.ci.upper",
"srmr", "cfi", "tli", "nfi", "ecvi"))
```

```
##          chisq             df          rmsea rmsea.ci.lower rmsea.ci.upper
##        381.525         59.000          0.135          0.122          0.148
##           srmr            cfi            tli            nfi           ecvi
##          0.205          0.681          0.578          0.649             NA
```

```
#Parameters Estimates
EstPCA2rf <- parameterEstimates(fitsaging1, standardized=T, ci=F)
subset(EstPCA2rf, op == "=~")
```

```
##       lhs op          rhs    est    se      z pvalue std.lv std.all
## 1  envels =~    meemtotal  1.000 0.000     NA     NA  1.040   0.344
## 2  envels =~     gdstotal -1.402 0.287 -4.878      0 -1.457  -0.644
## 3  envels =~     esvtotal  1.945 0.523  3.718      0  2.022   0.387
## 4  envels =~    autosaude -0.581 0.119 -4.869      0 -0.604  -0.590
## 5  envels =~   aivdptotal -0.586 0.155 -3.771      0 -0.609  -0.258
## 6   intel =~     voctotal  1.000 0.000     NA     NA  7.609   0.797
## 7   intel =~      rmtotal  0.375 0.086  4.337      0  2.851   0.592
## 8   sabed =~ X.3dwscogAFC  1.000 0.000     NA     NA  0.291   0.407
## 9   sabed =~ X.3dwsrefAFC  2.903 0.589  4.929      0  0.846   0.969
## 10  sabed =~ X.3dwsafeAFC  1.180 0.252  4.686      0  0.344   0.422
## 11  senti =~  qsvpresenca  1.000 0.000     NA     NA  2.187   0.453
## 12  senti =~     qsvbusca -2.125 0.470 -4.518      0 -4.647  -0.508
##    std.nox
## 1    0.344
## 2   -0.644
## 3    0.387
## 4   -0.590
## 5   -0.258
## 6    0.797
## 7    0.592
## 8    0.407
## 9    0.969
## 10   0.422
## 11   0.453
## 12  -0.508
```

```
#Modification Index
MIPCA2rf<-modindices(fitsaging1)
MIIPCA2rf<- MIPCA2rf[which(MIPCA2rf$mi>30),]
print(MIIPCA2rf)
```

```
##           lhs op          rhs     mi mi.scaled    epc sepc.lv sepc.all
## 64      intel =~    meemtotal 67.512    48.138  0.238   1.810    0.598
## 69      intel =~ X.3dwscogAFC 40.316    28.747  0.056   0.428    0.599
## 97  meemtotal ~~     voctotal 34.905    24.888 10.571  10.571    0.366
## 98  meemtotal ~~      rmtotal 36.264    25.858  5.805   5.805    0.398
## 162     intel  ~       envels 38.636    27.549  7.044   0.963    0.963
## 165     intel  ~   qcspatotal 38.637    27.549  1.218   0.160    0.358
##     sepc.nox
## 64     0.598
## 69     0.599
## 97     0.366
## 98     0.398
## 162    0.963
## 165    0.160
```

```
#Model Plot
semPaths(fitsaging1, what="path", whatLabels ="std", edge.label.cex = 0.7, exoVar =
F, exoCov = T, layout = "tree2", optimizeLatRes=T, style = "lisrel", curve= 0.9, si
zeLat = 5, sizeLat2 = 5, sizeMan = 3, sizeMan2 = 3, title = T, thresholds = F, curv
ePivot=T, intercepts = F, residuals = F)

#Define Title
title(main = "Figure 1. Structural Equation Model For Successful Aging", line = 1)

#Define Subtitle
title(sub = expression("Fit measures:" ~ chi^2~(31)==272,039 ~", p<0.001, n=303; CF
I=0.360; TLI=0.401; NFI=0.986; RMSEA=0.160; 90%CI(0.146-0.175); SRMR=0.045"), line
= 3, font.sub = 1, cex.sub = 0.5)
```

Figure 1. Structural Equation Model For Successful Aging