

```
model:mulACEc, matrix:meanG
      [,1]      [,2]      [,3]      [,4]
[1,] [mean_callous] [mean_vict3_cfa] [mean_callous] [mean_vict3_cfa]
```

```
model:mulACEc, matrix:a
      [,1] [,2]
[1,] [a11] 0
[2,] [a21] [a22]
```

```
model:mulACEc, matrix:c
      [,1] [,2]
[1,] [c11] 0
[2,] [c21] [c22]
```

```
model:mulACEc, matrix:e
      [,1] [,2]
[1,] [e11] 0
[2,] [e21] [e22]
```

```
model:MZ, matrix:meanG
      [,1]      [,2]      [,3]      [,4]
[1,] [mean_callous] [mean_vict3_cfa] [mean_callous] [mean_vict3_cfa]
```

```
model:MZ, matrix:a
      [,1] [,2]
[1,] [a11] 0
[2,] [a21] [a22]
```

```
model:MZ, matrix:c
      [,1] [,2]
[1,] [c11] 0
[2,] [c21] [c22]
```

```
model:MZ, matrix:e
      [,1] [,2]
[1,] [e11] 0
[2,] [e21] [e22]
```

```
model:DZ, matrix:meanG
      [,1]      [,2]      [,3]      [,4]
[1,] [mean_callous] [mean_vict3_cfa] [mean_callous] [mean_vict3_cfa]
```

```
model:DZ, matrix:a
      [,1] [,2]
[1,] [a11] 0
[2,] [a21] [a22]
```

```
model:DZ, matrix:c
      [,1] [,2]
[1,] [c11] 0
[2,] [c21] [c22]
```

```
model:DZ, matrix:e
      [,1] [,2]
[1,] [e11] 0
[2,] [e21] [e22]
```

```
Mx:mulACEc os=2004 ns=670 ep=11 co=0 df=1993 ll=7766.3901 cpu=0.275 opt=NPSOL ver=2.19.8
stc=0
```

```
Mx:mulAEc os=2004 ns=670 ep=8 co=0 df=1996 ll=7766.3901 cpu=0.18 opt=NPSOL ver=2.19.8 stc=1
```

```

      base comparison ep minus2LL df      AIC      diffLL diffdf      p
1 muLACEc      <NA> 11 7766.3901 1993 7788.3901      NA      NA      NA
2 muLACEc      mulCEc 8 7785.2672 1996 7801.2672 18.877094      3 0.00028987163
Mx:mulCEc os=2004 ns=670 ep=8 co=0 df=1996 ll=7785.2672 cpu=0.205 opt=NPSOL ver=2.19.8
stc=1
      base comparison ep minus2LL df      AIC      diffLL diffdf      p
1 muLAEc      <NA> 8 7766.3901 1996 7782.3901      NA      NA      NA
2 muLAEc      mulEc 5 7816.1753 1999 7826.1753 49.785156      3 8.8767775e-11
Mx:mulEc os=2004 ns=670 ep=5 co=0 df=1999 ll=7816.1753 cpu=0.172 opt=NPSOL ver=2.19.8 stc=0
      base comparison ep minus2LL df      AIC      diffLL diffdf      p
1 muLACEc      <NA> 11 7766.3901 1993 7788.3901      NA      NA      NA
2 muLACEc      muLAEc 8 7766.3901 1996 7782.3901 -1.0314398e-07      3 1.0000000e+00
3 muLACEc      mulCEc 8 7785.2672 1996 7801.2672 1.8877094e+01      3 2.8987163e-04
4 muLACEc      mulEc 5 7816.1753 1999 7826.1753 4.9785156e+01      6 5.1910916e-09
Summary of muLAEc

```

The final iterate satisfies the optimality conditions to the accuracy requested, but the sequence of iterates has not yet converged. Optimizer was terminated because no further improvement could be made in the merit function (Mx status GREEN).

free parameters:

	name	matrix	row	col	Estimate	Std.Error	A	lbound	ubound
1	mean_callous	meanG	1	1	17.288451952	0.152366069			
2	mean_vict3_cfa	meanG	1	2	-0.056886910	0.025139396			
3	a11	a	1	1	2.818494281	0.217066847		1e-04	
4	a21	a	2	1	0.156301831	0.063584788			-10
5	a22	a	2	2	0.266566623	0.084587687		1e-04	
6	e11	e	1	1	3.074391736	0.163569845		1e-04	
7	e21	e	2	1	-0.041671063	0.054996701			-10
8	e22	e	2	2	0.722220909	0.031595951		1e-04	

Model Statistics:

	Parameters	Degrees of Freedom	Fit (-2lnL units)
Model:	8	1996	7766.3901
Saturated:	NA	NA	NA
Independence:	NA	NA	NA

Number of observations/statistics: 670/2004

Information Criteria:

	df	Penalty	Parameters	Penalty	Sample-Size Adjusted
AIC:		3774.3901		7782.3901	7782.6080
BIC:		-5222.1362		7818.4483	7793.0477

CFI: NA

TLI: 1 (also known as NNFI)

RMSEA: 0 [95% CI (NA, NA)]

Prob(RMSEA <= 0.05): NA

To get additional fit indices, see help(mxRefModels)

timestamp: 2022-02-17 16:45:13

Wall clock time: 0.18001294 secs

optimizer: NPSOL

OpenMx version number: 2.19.8

Need help? See help(mxSummary)

[1] "Matrix a"

	PathA1	PathA2
callous	2.8185	0.0000
vict3_cfa	0.1563	0.2666

[1] "Matrix c"

	PathC1	PathC2
--	--------	--------

```
callous 0.0001 0.0000
vict3_cfa 0.0000 0.0001
```

```
[1] "Matrix e"
      PathE1 PathE2
callous 3.0744 0.0000
vict3_cfa -0.0417 0.7222
```

```
[1] "Matrix iSD"
      iSD1 iSD2
callous 0.2398 0.0000
vict3_cfa 0.0000 1.2712
```

```
[1] "Matrix iSD%**a"
      stPathA1 stPathA2
callous 0.6758 0.0000
vict3_cfa 0.1987 0.3389
```

```
[1] "Matrix iSD%**c"
      stPathC1 stPathC2
callous 0.0000 0.0000
vict3_cfa 0.0000 0.0001
```

```
[1] "Matrix iSD%**e"
      stPathE1 stPathE2
callous 0.7371 0.0000
vict3_cfa -0.0530 0.9181
```

```
[1] "Matrix (iSD%**a)*(iSD%**a)"
      stPathA^21 stPathA^22
callous 0.4567 0.0000
vict3_cfa 0.0395 0.1148
```

```
[1] "Matrix (iSD%**c)*(iSD%**c)"
      stPathC^21 stPathC^22
callous 0.0000 0.0000
vict3_cfa 0.0000 0.0000
```

```
[1] "Matrix (iSD%**e)*(iSD%**e)"
      stPathE^21 stPathE^22
callous 0.5433 0.0000
vict3_cfa 0.0028 0.8429
```

```
[1] "Matrix A"
      covA1 covA2
callous 7.9439 0.4405
vict3_cfa 0.4405 0.0955
```

```
[1] "Matrix C"
      covC1 covC2
callous 0.0000 0.0000
vict3_cfa 0.0000 0.0000
```

```
[1] "Matrix E"
      covE1 covE2
callous 9.4519 -0.1281
vict3_cfa -0.1281 0.5233
```

```
[1] "Matrix V"
      Var1 Var2
```

callous 17.3958 0.3124
vict3_cfa 0.3124 0.6188

[1] "Matrix A/V"
stCovA1 stCovA2
callous 0.4567 1.4101
vict3_cfa 1.4101 0.1543

[1] "Matrix C/V"
stCovC1 stCovC2
callous 0.0000 0.0000
vict3_cfa 0.0000 0.0000

[1] "Matrix E/V"
stCovE1 stCovE2
callous 0.5433 -0.4101
vict3_cfa -0.4101 0.8457

[1] "Matrix solve(sqrt(I*A))%%A"
CorA1 CorA2
callous 1.0000 0.5058
vict3_cfa 0.5058 1.0000

[1] "Matrix solve(sqrt(I*C))%%C"
corC1 corC2
callous 1.0000 0.2737
vict3_cfa 0.2737 1.0000

[1] "Matrix solve(sqrt(I*E))%%E"
corE1 corE2
callous 1.0000 -0.0576
vict3_cfa -0.0576 1.0000

[1] "Matrix a"
PathA1 PathA2
callous 2.8185 0.0000
vict3_cfa 0.1563 0.2666

[1] "Matrix e"
PathE1 PathE2
callous 3.0744 0.0000
vict3_cfa -0.0417 0.7222

[1] "Matrix iSD"
iSD1 iSD2
callous 0.2398 0.0000
vict3_cfa 0.0000 1.2712

[1] "Matrix iSD%*a"
stPathA1 stPathA2
callous 0.6758 0.0000
vict3_cfa 0.1987 0.3389

[1] "Matrix iSD%*e"
stPathE1 stPathE2
callous 0.7371 0.0000
vict3_cfa -0.0530 0.9181

[1] "Matrix (iSD%*a)*(iSD%*a)"
stPathA^21 stPathA^22

```
callous 0.4567 0.0000
vict3_cfa 0.0395 0.1148
```

```
[1] "Matrix (iSD%*%e)*(iSD%*%e)"
      stPathE^21 stPathE^22
callous 0.5433 0.0000
vict3_cfa 0.0028 0.8429
```

```
[1] "Matrix A"
      covA1 covA2
callous 7.9439 0.4405
vict3_cfa 0.4405 0.0955
```

```
[1] "Matrix E"
      covE1 covE2
callous 9.4519 -0.1281
vict3_cfa -0.1281 0.5233
```

```
[1] "Matrix V"
      Var1 Var2
callous 17.3958 0.3124
vict3_cfa 0.3124 0.6188
```

```
[1] "Matrix A/V"
      stCovA1 stCovA2
callous 0.4567 1.4101
vict3_cfa 1.4101 0.1543
```

```
[1] "Matrix E/V"
      stCovE1 stCovE2
callous 0.5433 -0.4101
vict3_cfa -0.4101 0.8457
```

```
[1] "Matrix solve(sqrt(I*A))%%A"
      CorA1 CorA2
callous 1.0000 0.5058
vict3_cfa 0.5058 1.0000
```

```
[1] "Matrix solve(sqrt(I*E))%%E"
      corE1 corE2
callous 1.0000 -0.0576
vict3_cfa -0.0576 1.0000
```