```
 1 .
 2 .
 3 .   cap gen whpsociso=WHPsociso

 4 .
 5 . *------------------Social isolation Models ------------------
 6 .
 7 .
 8 . *  Male Model
 9 . *-------
10 . /*
   >
   >                  Coefficient  Std.Error      HACSE  t-HACSE  t-prob Part.R^2
   > BSIposymp            -1.46478     0.5219     0.8332    -1.76  0.0798   0.010
   > 5
   > BSIglobsi             78.8130      26.11      41.84     1.88  0.0606   0.012
   > 0
   > BSIips               0.952409     0.4524     0.5870     1.62  0.1058   0.009
   > 0
   > BSIdep                1.81136     0.3513     0.3854     4.70  0.0000   0.070
   > 6
   > BSIphanx              1.39740     0.4819     0.6283     2.22  0.0269   0.016
   > 7
   > BSIhos               -1.14289     0.3950     0.4175    -2.74  0.0066   0.025
   > 1
   > childw1             -0.540819     0.9065     0.9830   -0.550  0.5826   0.001
   > 0
   > emplw16               3.71768      1.989      1.899     1.96  0.0512   0.013
   > 0
   > emplw25              -11.8891      6.084      6.719    -1.77  0.0778   0.010
   > 6
   > emplw32               5.35049      2.083      2.823     1.90  0.0591   0.012
   > 2
   > emplw33              -4.54916      2.324      2.613    -1.74  0.0827   0.010
   > 3
   > emplw34              -1.93771      4.239      3.503   -0.553  0.5805   0.001
   > 1
   > occ2w1                2.92963      2.181      1.698     1.73  0.0854   0.010
   > 1
   > occ3w1                2.14184      3.048      3.898    0.549  0.5832   0.001
   > 0
   > occ2w2               -6.45172      2.140      1.887    -3.42  0.0007   0.038
   > 6
   > occ7w2                18.7993      6.364      6.034     3.12  0.0020   0.032
   > 3
   > occ1w3               -3.70596      1.862      1.835    -2.02  0.0443   0.013
   > 8
   > occ3w3               -10.2579      2.695      3.056    -3.36  0.0009   0.037
   > 3
```

```
> occ4w3              -5.52024      2.358      2.278    -2.42  0.0160   0.019
> 8
> inc1w1              -5.93487      2.162      1.845    -3.22  0.0014   0.034
> 3
> inc2w2              -6.66515      1.785      1.889    -3.53  0.0005   0.041
> 0
> inc3w2              -5.31900      1.827      1.960    -2.71  0.0070   0.024
> 7
> inc1w3               2.64052      2.064      2.219     1.19  0.2351   0.004
> 8
> deaw2               -1.52614      1.067      1.044    -1.46  0.1450   0.007
> 3
> deaw3               -2.59636     0.7422     0.6189    -4.19  0.0000   0.057
> 0
> dvcew2              -5.24808      3.745      2.209    -2.38  0.0181   0.019
> 0
> accdw2              -3.85351      1.774      1.867    -2.06  0.0399   0.014
> 4
> accdw3               4.53051      2.037      1.908     2.37  0.0182   0.019
> 0
> illw3               -1.68376     0.8143     0.9070    -1.86  0.0644   0.011
> 7
> shjobw2          -0.0257525    0.02537    0.03555   -0.724  0.4694   0.001
> 8
> shhlw1           -0.0895325    0.03207    0.03236    -2.77  0.0060   0.025
> 6
> shhlw2            0.0885717    0.02906    0.03687     2.40  0.0169   0.019
> 4
> shhlw3            0.0374061    0.02177    0.02578     1.45  0.1479   0.007
> 2
> shhousw1          0.0284480    0.02825    0.03064    0.928  0.3540   0.003
> 0
> shrelaw1         -0.0322388    0.02429    0.02565    -1.26  0.2098   0.005
> 4
> shrelaw2         -0.0537294    0.02711    0.02556    -2.10  0.0364   0.015
> 0
> suprtw3          -0.0698056    0.01696    0.01765    -3.96  0.0001   0.051
> 0
> sufamw2           0.0313763    0.01787    0.01916     1.64  0.1026   0.009
> 1
> phlthw2           -0.130255    0.04622    0.04565    -2.85  0.0046   0.027
> 2
> mhlthw1            0.157294    0.05652    0.07700     2.04  0.0420   0.014
> 1
> mhlthw2           -0.102581    0.05359    0.07163    -1.43  0.1532   0.007
> 0
> mhlthw3          -0.0348549    0.03984    0.04767   -0.731  0.4652   0.001
> 8
> physdisagw1       0.0675537    0.02651    0.03190     2.12  0.0351   0.015
```

```
> 2
> physdisagw3        -0.0897442    0.05381    0.05622    -1.60  0.1115   0.008
> 7
> PTSDw2               0.116686    0.07006    0.08233     1.42  0.1575   0.006
> 9
> painmedspw2         -0.262683     0.4982     0.3496   -0.751  0.4531   0.001
> 9
> painmedspw3          0.360395     0.2595     0.1606     2.24  0.0256   0.017
> 0
>
> sigma                 10.4238  RSS                31618.9354
> log-likelihood       -1246.6
> no. of observations       338  no. of parameters          47
> mean(WHPsociso)       6.53124  se(WHPsociso)         15.1785
> When the log-likelihood constant is NOT included:
> AIC                   4.81657  SC                    5.34818
> HQ                    5.02844  FPE                   123.765
> When the log-likelihood constant is included:
> AIC                   7.65445  SC                    8.18606
> HQ                    7.86632  FPE                   2113.84
>
> Normality test:   Chi^2(2)  =   18.339 [0.0001]**
> Hetero test:      F(77,260) =   3.7956 [0.0000]**
> RESET23 test:     F(2,289)  =   48.418 [0.0000]**
>
>
>
> EQ( 5) Modelling WHPsociso by OLS-CS
>        The dataset is: /Users/robertyaffee/Documents/data/research/chwk/phas
> e3/
>        data/ox/workingdatasets/MARS/gals.dta
>        The estimation sample is: 1 - 340
>
>                   Coefficient  Std.Error      HACSE  t-HACSE  t-prob Part.R^
> 2
> BSIdep                2.68936     0.2834     0.3172     8.48  0.0000   0.176
> 7
> BSIphanx             -0.861432     0.3202     0.2628    -3.28  0.0012   0.031
> 1
> emplw25               14.5963      3.297      4.303     3.39  0.0008   0.033
> 2
> emplw33              -11.6544      15.94      1.338    -8.71  0.0000   0.184
> 8
> mhlthw1              -0.109320    0.02351    0.02273    -4.81  0.0000   0.064
> 6
>
> sigma                 15.8844  RSS                84525.3375
> log-likelihood       -1420.14
> no. of observations       340  no. of parameters           5
```

```
   > mean(WHPsociso)         10.28  se(WHPsociso)         18.9672
   > When the log-likelihood constant is NOT included:
   > AIC                   5.54527  SC                    5.60158
   > HQ                    5.56771  FPE                   256.025
   > When the log-likelihood constant is included:
   > AIC                   8.38315  SC                    8.43946
   > HQ                    8.40559  FPE                   4372.77
   >
   > Normality test:   Chi^2(2)  =   198.40 [0.0000]**
   > Hetero test:      F(7,331)  =   3.4195 [0.0015]**
   > Hetero-X test:    F(10,328) =   2.6079 [0.0046]**
   > RESET23 test:     F(2,333)  =  0.28016 [0.7558]
   >
   > */
11 .
12 . cap gen whpsociso = WHPsociso

13 . // candidate illness variables for social isolation
14 . /* candiate illnesses  for males
   >
   > foreach i in 7 {
   > foreach j in 1 5 6 {
   > foreach k in 3 {
   > foreach m in 2 {
   > foreach n in 4 {
   > regress whpsociso icdx`i'nr1-icdx`i'nr28 if gender==1
   > regress whpsociso icdx`j'nr1-icdx`j'nr18 if gender==1
   > regress whpsociso icdx`k'nr1-icdx`k'nr11 if gender==1
   > regress whpsociso icdx`m'nr1-icdx`m'nr8 if gender==1
   > regress whpsociso icdx`n'nr1-icdx`n'nr20 if gender==1
   > }
   > }
   > }
   > }
   > }
   >
   > */
```

```
15 .
16 . cap drop H8MaleSIpred

17 . cap drop h8Msepred

18 . cap drop Mrsires

19 . cap drop upbm

20 . cap drop lpbm

21 . des icdx4nr9 icdx4nr10 icdx7nr21 icdx7nr26

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
icdx4nr9        double %8.0g                  icdx4nr==434.91 crbrl art ocl
                                                nos w infarc
icdx4nr10       double %8.0g                  icdx4nr==varicose veins in legs
icdx7nr21       double %8.0g                  icdx7nr==acute renal failure
icdx7nr26       double %8.0g                  icdx7nr==intervertebral disc
                                                dis*

22 .
23 . ****  Full WHPsocial model for males--------
24 . regress WHPsociso age BSIposymp BSIips BSIdep BSIphanx  ///
>   emplw32 deaw2 deaw3 dvcew2  shhlw1 shhlw2 shhousw2 suprtw3  ///
>      crhtw1-crhtw3 icdx4nr9 icdx4nr10 icdx7nr21 icdx7nr26 ///
>      if gender==1, vce(cluster id)

Linear regression                               Number of obs =     339
                                                F( 17,   338) =       .
                                                Prob > F      =       .
                                                R-squared     =  0.4968
                                                Root MSE      =  10.872

                                   (Std. Err. adjusted for 339 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   WHPsociso |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .1700205   .0579318     2.93   0.004     .0560683    .2839728
   BSIposymp |  -.0216516   .0968927    -0.22   0.823    -.2122403    .1689372
      BSIips |   1.073753     .55662     1.93   0.055    -.021123    2.168628
      BSIdep |   2.126824   .4385046     4.85   0.000     1.264282    2.989365
    BSIphanx |    1.41255   .6327604     2.23   0.026     .1679057    2.657194
     emplw32 |   5.848379   2.527965     2.31   0.021     .8758538     10.8209
       deaw2 |   -2.69631   1.052977    -2.56   0.011    -4.767522    -.625097
       deaw3 |  -2.070884    .628816    -3.29   0.001    -3.307769   -.8339981
```

dvcew2	-3.551127	2.243778	-1.58	0.114	-7.964655	.8624015
shhlw1	-.0664955	.0236261	-2.81	0.005	-.1129681	-.0200229
shhlw2	.0562521	.0242629	2.32	0.021	.0085267	.1039774
shhousw2	-.0544403	.0210498	-2.59	0.010	-.0958454	-.0130351
suprtw3	-.0454372	.0186249	-2.44	0.015	-.0820726	-.0088018
crhtw1	-.7211362	.9839712	-0.73	0.464	-2.656615	1.214342
crhtw2	1.406166	2.38729	0.59	0.556	-3.289651	6.101984
crhtw3	-1.045664	2.155255	-0.49	0.628	-5.285067	3.193739
icdx4nr9	24.40582	2.785805	8.76	0.000	18.92612	29.88552
icdx4nr10	12.1418	5.956804	2.04	0.042	.4247197	23.85887
icdx7nr21	21.98954	4.234449	5.19	0.000	13.66035	30.31874
icdx7nr26	6.332913	6.05056	1.05	0.296	-5.568583	18.23441
_cons	-26.96642	4.808897	-5.61	0.000	-36.42556	-17.50729

```
25 .      predict H8MaleSIpred if gender==2, xb
   (340 missing values generated)

26 .      predict h8Msepred if gender==2, stdp
   (340 missing values generated)

27 .      predict Mrsires if gender==2, residual
   (340 missing values generated)

28 .      gen upbm = H8MaleSIpred + 1.96*h8Msepred
   (340 missing values generated)

29 .      gen lpbm = H8MaleSIpred - 1.96*h8Msepred
   (340 missing values generated)

30 .
31 . scatter H8MaleSIpred Mrsires || lowess H8MaleSIpred  Mrsires  ///
   >   || lowess upbm Mrsires || lowess lpbm Mrsires, ///
   >   title(Prediction interval of Male social isolation model)   ///
   >   ytitle(Predicted Male Social Isolation)

32 .
```

```
33 . gr save MSocIsoPredInt.gph, replace
   (file MSocIsoPredInt.gph saved)

34 . gr export MSocIsoPredInt.eps, replace
   (file MSocIsoPredInt.eps written in EPS format)

35 . gr use  MsocIsoPredInt.gph

36 .
37 . cap drop H8MaleSIpred

38 . cap drop h8Msepred

39 . cap drop Mrsires

40 . cap drop upbm

41 . cap drop lpbm

42 . des icdx4nr9 icdx4nr10 icdx7nr21 icdx7nr26

              storage  display     value
   variable name   type   format      label      variable label
   ------------------------------------------------------------------------------
   icdx4nr9        double %8.0g                  icdx4nr==434.91 crbrl art ocl
                                                   nos w infarc
   icdx4nr10       double %8.0g                  icdx4nr==varicose veins in legs
   icdx7nr21       double %8.0g                  icdx7nr==acute renal failure
   icdx7nr26       double %8.0g                  icdx7nr==intervertebral disc
                                                   dis*

43 .
44 . ****  Trimmed WHPsocial model for males--------
45 . regress WHPsociso age  BSIips BSIdep BSIphanx  ///
   >   emplw32 deaw2 deaw3 dvcew2  shhlw1 shhlw2 shhousw2 suprtw3  ///
   >      crhtw1-crhtw3 icdx4nr9 icdx4nr10 icdx7nr21 ///
   >      if gender==1, vce(cluster id)

   Linear regression                               Number of obs =     339
                                                   F( 16,   338) =       .
                                                   Prob > F      =       .
                                                   R-squared     =  0.4962
                                                   Root MSE      =  10.844
```

(Std. Err. adjusted for **339** clusters in id)

WHPsociso	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	**.1702193**	**.0582689**	**2.92**	**0.004**	**.0556039**	**.2848348**
BSIips	**1.041183**	**.4358448**	**2.39**	**0.017**	**.183873**	**1.898493**
BSIdep	**2.046723**	**.3610228**	**5.67**	**0.000**	**1.336588**	**2.756857**
BSIphanx	**1.37608**	**.460444**	**2.99**	**0.003**	**.4703829**	**2.281776**
emplw32	**5.873105**	**2.511393**	**2.34**	**0.020**	**.9331761**	**10.81303**
deaw2	**-2.681306**	**1.071113**	**-2.50**	**0.013**	**-4.788193**	**-.5744192**
deaw3	**-2.097814**	**.6311584**	**-3.32**	**0.001**	**-3.339307**	**-.8563209**
dvcew2	**-3.40953**	**2.187922**	**-1.56**	**0.120**	**-7.713188**	**.8941275**
shhlw1	**-.0671173**	**.0238963**	**-2.81**	**0.005**	**-.1141215**	**-.020113**
shhlw2	**.0555722**	**.023593**	**2.36**	**0.019**	**.0091646**	**.1019798**
shhousw2	**-.0554974**	**.0207116**	**-2.68**	**0.008**	**-.0962373**	**-.0147576**
suprtw3	**-.0468964**	**.0170784**	**-2.75**	**0.006**	**-.0804896**	**-.0133031**
crhtw1	**-.7561203**	**.991878**	**-0.76**	**0.446**	**-2.707151**	**1.194911**
crhtw2	**1.237723**	**2.382447**	**0.52**	**0.604**	**-3.448567**	**5.924014**
crhtw3	**-.9908577**	**2.119222**	**-0.47**	**0.640**	**-5.159383**	**3.177668**
icdx4nr9	**24.43334**	**2.82846**	**8.64**	**0.000**	**18.86974**	**29.99694**
icdx4nr10	**12.22233**	**5.753835**	**2.12**	**0.034**	**.9044962**	**23.54017**
icdx7nr21	**21.90734**	**3.88123**	**5.64**	**0.000**	**14.27293**	**29.54174**
_cons	**-27.33982**	**4.622288**	**-5.91**	**0.000**	**-36.4319**	**-18.24775**

```
46 . *-+- no social isolation threat relationships for males
47 .      predict H8MaleSIpred if gender==2, xb
   (340 missing values generated)

48 .      predict h8Msepred if gender==2, stdp
   (340 missing values generated)

49 .      predict Mrsires if gender==2, residual
   (340 missing values generated)

50 .      gen upbm = H8MaleSIpred + 1.96*h8Msepred
   (340 missing values generated)
```

```
51 .      gen lpbm = H8MaleSIpred - 1.96*h8Msepred
   (340 missing values generated)

52 .
53 . scatter H8MaleSIpred Mrsires || lowess H8MaleSIpred  Mrsires  ///
   >   || lowess upbm Mrsires || lowess lpbm Mrsires, ///
   >   title(Prediction interval of Male social isolation model)   ///
   >   ytitle(Predicted Male Social Isolation)

54 .
55 . gr save MSocIsoPredInt.gph, replace
   (file MSocIsoPredInt.gph saved)

56 . gr export MSocIsoPredInt.eps, replace
   (file MSocIsoPredInt.eps written in EPS format)

57 . gr use  MsocIsoPredInt.gph

58 .
59 .
60 . // No significant main effects for risk perception and male social isolation
61 .
62 .
63 . title "tests for possible indirect effects for male social isolation model"


   ********************************************************************************
   > *
   ********************************************************************************
   > *
   *****                                                                      ****
   > *
   *****                                                                      ****
   > *
   *****tests for possible indirect effects for male social isolation model  ****
   > *
   *****                                                                      ****
   > *
   *****                                                                      ****
   > *
   *****                                          13 Jul 2012    12:42:25  ****
   > *
   ********************************************************************************
   > *
   ********************************************************************************
   > *
```

```
64 . set more off

65 . foreach var in age  BSIips BSIdep BSIphanx  ///
>   emplw32 deaw2 deaw3 dvcew2  shhlw1 shhlw2 shhousw2 suprtw3  ///
>     icdx4nr9 icdx4nr10 icdx7nr21 {
  2. sem (crhtw1-> `var')(`var'-> whpsociso) if gender==1, nocapslatent iterat
> e(50)
  3. sem (crhtw2-> `var')(`var'-> whpsociso) if gender==1, nocapslatent iterat
> e(50)
  4. sem (crhtw3-> `var')(`var'-> whpsociso) if gender==1, nocapslatent iterat
> e(50)
  5. }

Endogenous variables

Observed:  age whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3158.3801
Iteration 1:   log likelihood = -3158.3801

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3158.3801

------------------------------------------------------------------------------
> ---
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ---
Structural   |
  age <-     |
       crhtw1 |   4.266795   .6763452     6.31   0.000     2.941183    5.5924
> 08
        _cons |   49.78043    .635245    78.36   0.000     48.53537    51.025
> 49
-------------+----------------------------------------------------------------
> ---
  whpsociso <-|
         age |   .1792895   .0652429     2.75   0.006     .0514157    .30716
> 33
        _cons |  -2.485828   3.305857    -0.75   0.452    -8.965188    3.9935
```

```
> 31
-------------+----------------------------------------------------------------
> ---
Variance     |
         e.age |   133.6667   10.26687                      114.9854     155.3
> 83
   e.whpsociso |   215.5252   16.55439                      185.4034    250.54
> 08
-------------+----------------------------------------------------------------
> ---
LR test of model vs. saturated: chi2(1)   =      0.32, Prob > chi2 = 0.5737

Endogenous variables

Observed:  age whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3148.8835
Iteration 1:   log likelihood = -3148.8835

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3148.8835

-------------+----------------------------------------------------------------
> ---
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ---
Structural   |
  age <-     |
       crhtw2 |   4.951499   .6691348     7.40   0.000     3.640019    6.2629
> 79
        _cons |   50.08515   .6280741    79.74   0.000     48.85415    51.316
> 16
  -----------+----------------------------------------------------------------
> ---
  whpsociso <- |
         age |   .1792895   .0652429     2.75   0.006     .0514157    .30716
> 33
        _cons |  -2.485828   3.305857    -0.75   0.452    -8.965188    3.9935
> 31
```

```
-------------+----------------------------------------------------------------
> ──
Variance     |
         e.age |   128.5885   9.876824                      110.617    149.47
> 98
   e.whpsociso |   215.5252   16.55439                      185.4034    250.54
> 08
-------------+----------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      4.02, Prob > chi2 = 0.0451

Endogenous variables

Observed:  age whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3149.3769
Iteration 1:   log likelihood = -3149.3769

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3149.3769

-------------+----------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  age <-     |
       crhtw3 |   4.882082   .6713623     7.27   0.000     3.566236    6.1979
> 28
        _cons |   50.07363    .629633    79.53   0.000     48.83957    51.307
> 69
  ───────────+────────────────────────────────────────────────────────────────
> ──
  whpsociso <-|
          age |   .1792895   .0652429     2.75   0.006     .0514157    .30716
> 33
        _cons |  -2.485828   3.305857    -0.75   0.452    -8.965188    3.9935
> 31
-------------+----------------------------------------------------------------
```

```
> ——
Variance        |
         e.age |   129.2045   9.924137                      111.1469    150.19
> 59
   e.whpsociso |   215.5252   16.55439                      185.4034    250.54
> 08
----------------+-----------------------------------------------------------
> ——
LR test of model vs. saturated: chi2(1)   =      3.94, Prob > chi2 = 0.0473

Endogenous variables

Observed:  BSIips whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -2574.5462
Iteration 1:   log likelihood = -2574.5462

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2574.5462

----------------+-----------------------------------------------------------
> ——
                |                 OIM
                |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
----------------+-----------------------------------------------------------
> ——
Structural      |
  BSIips <-     |
       crhtw1 |   .2430919   .1379814     1.76   0.078    -.0273466     .51353
> 04
        _cons |   5.892955   .1295965    45.47   0.000      5.63895    6.1469
> 59
  ——————————————+———————————————————————————————————————————————————————
> ——
  whpsociso <-  |
       BSIips |   3.130531   .2947148    10.62   0.000       2.5529    3.7081
> 61
        _cons |  -12.00936   1.862428    -6.45   0.000    -15.65965   -8.3590
> 71
----------------+-----------------------------------------------------------
> ——
```

```
Variance        |
      e.BSIips  |   5.563233   .4273094                      4.785716    6.4670
> 72
   e.whpsociso  |   165.3062    12.6971                       142.203    192.16
> 29
-------------------------------------------------------------------------------

> ——
LR test of model vs. saturated: chi2(1)   =      0.38, Prob > chi2 = 0.5380

Endogenous variables

Observed:  BSIips whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2564.4593
Iteration 1:   log likelihood = -2564.4593

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2564.4593

-------------------------------------------------------------------------------

> ——
                |                 OIM
                |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
----------------+--------------------------------------------------------------

> ——
Structural      |
  BSIips <-     |
        crhtw2  |   .5758156   .1362729     4.23   0.000     .3087256    .84290
> 56
         _cons  |   5.964361   .1279107    46.63   0.000     5.713661    6.2150
> 62
  --------------+--------------------------------------------------------------

> ——
  whpsociso <-  |
        BSIips  |   3.130531   .2947148    10.62   0.000       2.5529    3.7081
> 61
         _cons  |  -12.00936   1.862428    -6.45   0.000    -15.65965   -8.3590
> 71
----------------+--------------------------------------------------------------

> ——
Variance        |
```

```
      e.BSIips |   5.333276   .4096465                      4.587897    6.1997
> 54
   e.whpsociso |   165.3062    12.6971                       142.203    192.16
> 29
---------------+--------------------------------------------------------------
> ——
LR test of model vs. saturated: chi2(1)   =      0.87, Prob > chi2 = 0.3498

Endogenous variables

Observed:  BSIips whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2562.7367
Iteration 1:   log likelihood = -2562.7367

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2562.7367

---------------+--------------------------------------------------------------
> ——
               |                 OIM
               |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
---------------+--------------------------------------------------------------
> ——
Structural     |
  BSIips <-    |
       crhtw3  |   .6199075   .1358357     4.56   0.000     .3536744    .88614
> 05
        _cons  |   5.972633   .1273927    46.88   0.000     5.722948    6.2223
> 18
  -------------+--------------------------------------------------------------
> ——
  whpsociso <- |
       BSIips  |   3.130531   .2947148    10.62   0.000       2.5529    3.7081
> 61
        _cons  |  -12.00936   1.862428    -6.45   0.000    -15.65965   -8.3590
> 71
---------------+--------------------------------------------------------------
> ——
Variance       |
      e.BSIips |   5.289219   .4062625                      4.549997    6.1485
```

```
> 39
   e.whpsociso |   165.3062    12.6971                      142.203    192.16
> 29
---------------+--------------------------------------------------------------
> ---
LR test of model vs. saturated: chi2(1)   =      0.52, Prob > chi2 = 0.4721

Endogenous variables

Observed:  BSIdep whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =  -2614.983
Iteration 1:   log likelihood =  -2614.983

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     =  -2614.983

---------------+--------------------------------------------------------------
> ---
               |                 OIM
               |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
---------------+--------------------------------------------------------------
> ---
Structural     |
  BSIdep <-    |
       crhtw1  |   .5548862   .1648543     3.37   0.001     .2317777     .87799
> 48
        _cons  |   8.199803   .1548364    52.96   0.000      7.89633    8.5032
> 77
---------------+--------------------------------------------------------------
> ---
  whpsociso <- |
       BSIdep  |   2.989016   .2298724    13.00   0.000     2.538475    3.4395
> 58
        _cons  |  -17.94307   1.979525    -9.06   0.000    -21.82287   -14.063
> 28
---------------+--------------------------------------------------------------
> ---
Variance       |
     e.BSIdep  |   7.941215   .6099611                      6.831351    9.2313
> 96
```

```
   e.whpsociso |   147.0067   11.29152                      126.461    170.89
> 03
---------------+--------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      0.39, Prob > chi2 = 0.5314

Endogenous variables

Observed:  BSIdep whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2603.8171
Iteration 1:   log likelihood = -2603.8171

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2603.8171

---------------+--------------------------------------------------------------
> ──
               |                 OIM
               |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
---------------+--------------------------------------------------------------
> ──
Structural     |
  BSIdep <-    |
       crhtw2  |   .8704939   .1622957     5.36   0.000     .5524002    1.1885
> 88
        _cons  |   8.281121   .1523366    54.36   0.000     7.982547    8.5796
> 96
  -------------+--------------------------------------------------------------
> ──
  whpsociso <- |
       BSIdep  |   2.989016   .2298724    13.00   0.000     2.538475    3.4395
> 58
        _cons  |  -17.94307   1.979525    -9.06   0.000    -21.82287   -14.063
> 28
---------------+--------------------------------------------------------------
> ──
Variance       |
     e.BSIdep  |   7.564653   .5810375                      6.507417    8.7936
> 55
   e.whpsociso |   147.0067   11.29152                      126.461    170.89
```

```
> 03
---------------+------------------------------------------------------------------
> ---
LR test of model vs. saturated: chi2(1)   =      0.02, Prob > chi2 = 0.8747

Endogenous variables

Observed:  BSIdep whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2602.7314
Iteration 1:   log likelihood = -2602.7314

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2602.7314

---------------+------------------------------------------------------------------
> ---
               |                 OIM
               |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
---------------+------------------------------------------------------------------
> ---
Structural     |
  BSIdep <-    |
       crhtw3  |   .8942456   .1620792     5.52   0.000     .5765761    1.2119
> 15
        _cons  |   8.285721    .152005    54.51   0.000     7.987796    8.5836
> 45
  -------------+------------------------------------------------------------------
> ---
  whpsociso <- |
       BSIdep  |   2.989016   .2298724    13.00   0.000     2.538475    3.4395
> 58
        _cons  |  -17.94307   1.979525    -9.06   0.000    -21.82287   -14.063
> 28
---------------+------------------------------------------------------------------
> ---
Variance       |
      e.BSIdep |   7.530408   .5784071                      6.477957    8.7538
> 46
   e.whpsociso |   147.0067   11.29152                       126.461    170.89
> 03
```

```
LR test of model vs. saturated: chi2(1)   =      0.09, Prob > chi2 = 0.7679

Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -2540.0263
Iteration 1:   log likelihood = -2540.0263

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2540.0263
```

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
BSIphanx <-						
crhtw1	.3096038	.1222478	2.53	0.011	.0700025	.5492051
_cons	6.406832	.114819	55.80	0.000	6.181791	6.631873
whpsociso <-						
BSIphanx	3.302734	.3374787	9.79	0.000	2.641288	3.964181
_cons	-14.68418	2.262243	-6.49	0.000	-19.1181	-10.25027
Variance						
e.BSIphanx	4.366851	.3354158			3.75654	5.076318
e.whpsociso	171.7912	13.19521			147.7817	199.7015

```
> ——
LR test of model vs. saturated: chi2(1)   =      0.07, Prob > chi2 = 0.7929

Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2529.7042
Iteration 1:   log likelihood = -2529.7042

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2529.7042

——————————————┼———————————————————————————————————————————————————————————
> ——
              │                 OIM
              │      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
——————————————┼———————————————————————————————————————————————————————————
> ——
Structural    │
  BSIphanx <- │
        crhtw2 │   .5634246   .1206504     4.67   0.000     .3269542     .7998
> 95
         _cons │   6.466506   .1132468    57.10   0.000     6.244546     6.6884
> 66
  ————————————┼———————————————————————————————————————————————————————————
> ——
  whpsociso <- │
      BSIphanx │   3.302734   .3374787     9.79   0.000     2.641288     3.964
> 18
         _cons │  -14.68418   2.262243    -6.49   0.000    -19.1181    -10.250
> 27
——————————————┼———————————————————————————————————————————————————————————
> ——
Variance      │
     e.BSIphanx │   4.180539   .3211053                      3.596267     4.8597
> 36
    e.whpsociso │   171.7912   13.19521                      147.7817     199.70
> 15
——————————————┼———————————————————————————————————————————————————————————
> ——
```

```
LR test of model vs. saturated: chi2(1)   =      0.71, Prob > chi2 = 0.3984

Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2528.2574
Iteration 1:   log likelihood = -2528.2574

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2528.2574

------------------------------------------------------------------------------
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> --
Structural   |
  BSIphanx <-|
       crhtw3|   .5923644   .1203612     4.92   0.000     .3564609      .8282
> 68
       _cons |   6.471983     .11288    57.34   0.000     6.250742    6.6932
> 24
-------------+----------------------------------------------------------------
> --
  whpsociso <-|
     BSIphanx|   3.302734   .3374787     9.79   0.000     2.641288     3.964
> 18
       _cons |  -14.68418   2.262243    -6.49   0.000     -19.1181   -10.250
> 27
-------------+----------------------------------------------------------------
> --
Variance     |
    e.BSIphanx|   4.152757   .3189714                      3.572368    4.8274
> 41
   e.whpsociso|   171.7912   13.19521                      147.7817    199.70
> 15
------------------------------------------------------------------------------
> --
LR test of model vs. saturated: chi2(1)   =      0.47, Prob > chi2 = 0.4917
```

Endogenous variables

Observed: **emplw32 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1917.5086**
Iteration 1: log likelihood = **-1917.5086**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1917.5086**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
emplw32 <-					
crhtw1	.0267947	.0172799	1.55	0.121	-.0070732 .06626
_cons	.1011532	.0162298	6.23	0.000	.0693433 .1329
whpsociso <-					
emplw32	4.6023	2.708154	1.70	0.089	-.7055838 9.9101
_cons	5.882549	.8449488	6.96	0.000	4.22648 7.5386
Variance					
e.emplw32	.0872502	.0067016			.0750561 .10142
e.whpsociso	218.4652	16.78021			187.9325 253.95

LR test of model vs. saturated: chi2(**1**) = **1.63**, Prob > chi2 = **0.2017**

Endogenous variables

Observed: **emplw32 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1913.8831**
Iteration 1: log likelihood = **-1913.8831**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1913.8831**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
emplw32 <-						
crhtw2	**.0339301**	**.0173943**	**1.95**	**0.051**	**-.0001621**	**.06802**
_cons	**.1035885**	**.0163269**	**6.34**	**0.000**	**.0715884**	**.13558**
whpsociso <-						
emplw32	**4.6023**	**2.708154**	**1.70**	**0.089**	**-.7055838**	**9.9101**
_cons	**5.882549**	**.8449488**	**6.96**	**0.000**	**4.22648**	**7.5386**
Variance						
e.emplw32	**.0868937**	**.0066743**			**.0747495**	**.10101**
e.whpsociso	**218.4652**	**16.78021**			**187.9325**	**253.95**

LR test of model vs. saturated: chi2(**1**) = **7.34**, Prob > chi2 = **0.0067**

Endogenous variables

Observed: **emplw32 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-1914.4965**
Iteration 1: log likelihood = **-1914.4965**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1914.4965**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
emplw32 <-						
crhtw3	.0242487	.0174584	1.39	0.165	-.0099691	.05846
_cons	.1018133	.0163732	6.22	0.000	.0697223	.13390
whpsociso <-						
emplw32	4.6023	2.708154	1.70	0.089	-.7055838	9.9101
_cons	5.882549	.8449488	6.96	0.000	4.22648	7.5386
Variance						
e.emplw32	.0873718	.006711			.0751608	.10156
e.whpsociso	218.4652	16.78021			187.9325	253.95

LR test of model vs. saturated: chi2(**1**) = **7.42**, Prob > chi2 = **0.0064**

```
Endogenous variables

Observed:  deaw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =  -2159.049
Iteration 1:   log likelihood =  -2159.049

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     =  -2159.049

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  deaw2 <-   |
       crhtw1 |  -.0430551   .0350885    -1.23   0.220    -.1118274    .02571
> 71
        _cons |   .2888663   .0329563     8.77   0.000     .2242732    .35345
> 94
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       deaw2 |   .2843554   1.341015     0.21   0.832    -2.343986    2.9126
> 97
        _cons |    6.24668   .8979573     6.96   0.000     4.486716    8.0066
> 44
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.deaw2 |   .3597634   .0276333                     .3094829    .41821
> 29
   e.whpsociso |   220.2971   16.92092                     189.5084     256.0
> 88
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      2.04, Prob > chi2 = 0.1537
```

Endogenous variables

Observed: **deaw2 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-2156.7671**
Iteration 1: log likelihood = **-2156.7671**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-2156.7671**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
deaw2 <-						
crhtw2	.015978	.0354612	0.45	0.652	-.0535247	.08548
_cons	.2979253	.0332852	8.95	0.000	.2326876	.3631
whpsociso <-						
deaw2	.2843554	1.341015	0.21	0.832	-2.343986	2.9126
_cons	6.24668	.8979573	6.96	0.000	4.486716	8.0066
Variance						
e.deaw2	.361145	.0277394			.3106714	.41981
e.whpsociso	220.2971	16.92092			189.5084	256.0

LR test of model vs. saturated: chi2(**1**) = **8.18**, Prob > chi2 = **0.0042**

Endogenous variables

Observed: **deaw2 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-2156.3568**
Iteration 1: log likelihood = **-2156.3568**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-2156.3568**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
deaw2 <-						
crhtw3	.0221721	.0354845	0.62	0.532	-.0473763	.09172
_cons	.2990708	.0332789	8.99	0.000	.2338452	.36429
whpsociso <-						
deaw2	.2843554	1.341015	0.21	0.832	-2.343986	2.9126
_cons	6.24668	.8979573	6.96	0.000	4.486716	8.0066
Variance						
e.deaw2	.3609456	.0277241			.3104998	.41958
e.whpsociso	220.2971	16.92092			189.5084	256.0

LR test of model vs. saturated: chi2(**1**) = **8.00**, Prob > chi2 = **0.0047**

```
Endogenous variables

Observed:  deaw3 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -2298.1311
Iteration 1:   log likelihood = -2298.1311

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -2298.1311

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  deaw3 <-   |
       crhtw1 |   -.063338   .0528845    -1.20   0.231    -.1669897    .04031
> 37
        _cons |   .5308215   .0496708    10.69   0.000     .4334685    .62817
> 45
-------------+----------------------------------------------------------------
> ----
  whpsociso <- |
        deaw3 |  -.1269986    .889881    -0.14   0.887    -1.871133    1.6171
> 36
        _cons |   6.399117   .9384319     6.82   0.000     4.559825     8.238
> 41
-------------+----------------------------------------------------------------
> ----
Variance     |
      e.deaw3 |   .8172276   .0627709                      .7030118    .94999
> 96
   e.whpsociso |   220.3131   16.92215                      189.5221    256.10
> 66
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      1.97, Prob > chi2 = 0.1606
```

Endogenous variables

Observed: **deaw3 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-2295.9125**
Iteration 1: log likelihood = **-2295.9125**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-2295.9125**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
deaw3 <-						
crhtw2	.0039511	.0534561	0.07	0.941	-.100821	.10872
_cons	.54055	.0501758	10.77	0.000	.4422072	.63889
whpsociso <-						
deaw3	-.1269986	.889881	-0.14	0.887	-1.871133	1.6171
_cons	6.399117	.9384319	6.82	0.000	4.559825	8.238
Variance						
e.deaw3	.8206723	.0630355			.7059751	.95400
e.whpsociso	220.3131	16.92215			189.5221	256.10

LR test of model vs. saturated: chi2(**1**) = **8.21**, Prob > chi2 = **0.0042**

Endogenous variables

Observed: **deaw3 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-2295.5882**
Iteration 1: log likelihood = **-2295.5882**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-2295.5882**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
deaw3 <-						
crhtw3	-.0076977	.0535049	-0.14	0.886	-.1125653	.09799
_cons	.5384046	.0501792	10.73	0.000	.4400552	.63675
whpsociso <-						
deaw3	-.1269986	.889881	-0.14	0.887	-1.871133	1.6171
_cons	6.399117	.9384319	6.82	0.000	4.559825	8.238
Variance						
e.deaw3	.8206354	.0630326			.7059434	.95396
e.whpsociso	220.3131	16.92215			189.5221	256.10

LR test of model vs. saturated: chi2(**1**) = **8.03**, Prob > chi2 = **0.0046**

Endogenous variables

Observed: **dvcew2 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1712.5829**
Iteration 1: log likelihood = **-1712.5829**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1712.5829**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
dvcew2 <-					
crhtw1	.0045736	.0094012	0.49	0.627	-.0138525 .02299
_cons	.0271987	.0088299	3.08	0.002	.0098923 .0445
whpsociso <-					
dvcew2	.8189595	5.014617	0.16	0.870	-9.009509 10.647
_cons	6.308818	.8170698	7.72	0.000	4.707391 7.9102
Variance					
e.dvcew2	.0258258	.0019837			.0222164 .03002
e.whpsociso	220.309	16.92183			189.5186 256.10

LR test of model vs. saturated: chi2(**1**) = **1.98**, Prob > chi2 = **0.1599**

Endogenous variables

Observed: **dvcew2 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1709.7573**
Iteration 1: log likelihood = **-1709.7573**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1709.7573**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
dvcew2 <-						
crhtw2	.0014884	.0094858	0.16	0.875	-.0171035	.02008
_cons	.0268225	.0089037	3.01	0.003	.0093715	.04427
whpsociso <-						
dvcew2	.8189595	5.014617	0.16	0.870	-9.009509	10.647
_cons	6.308818	.8170698	7.72	0.000	4.707391	7.9102
Variance						
e.dvcew2	.025842	.0019849			.0222303	.03004
e.whpsociso	220.309	16.92183			189.5186	256.10

LR test of model vs. saturated: chi2(**1**) = **8.20**, Prob > chi2 = **0.0042**

```
Endogenous variables

Observed:  dvcew2 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1709.4458
Iteration 1:   log likelihood = -1709.4458

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -1709.4458

------------------------------------------------------------------------------
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> --
Structural   |
  dvcew2 <-  |
       crhtw3 |   .0011383   .0094948     0.12   0.905    -.0174712    .01974
> 79
        _cons |   .0267584   .0089047     3.00   0.003     .0093056    .04421
> 13
-------------+----------------------------------------------------------------
> --
  whpsociso <- |
       dvcew2 |   .8189595   5.014617     0.16   0.870    -9.009509    10.647
> 43
        _cons |   6.308818   .8170698     7.72   0.000     4.707391    7.9102
> 46
-------------+----------------------------------------------------------------
> --
Variance     |
     e.dvcew2 |   .0258427    .001985                      .022231    .03004
> 13
   e.whpsociso |    220.309   16.92183                     189.5186    256.10
> 18
------------------------------------------------------------------------------
> --
LR test of model vs. saturated: chi2(1)   =      8.03, Prob > chi2 = 0.0046
```

Endogenous variables

Observed: **shhlw1 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-3510.8551**
Iteration 1: log likelihood = **-3510.8551**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3510.8551**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw1 <-						
crhtw1	**15.86868**	**1.893069**	**8.38**	**0.000**	**12.15833**	**19.579 > 02**
_cons	**36.65936**	**1.778031**	**20.62**	**0.000**	**33.17448**	**40.144 > 24**
whpsociso <-						
shhlw1	**.0134276**	**.0226619**	**0.59**	**0.554**	**-.0309889**	**.0578 > 44**
_cons	**5.868597**	**1.121218**	**5.23**	**0.000**	**3.671049**	**8.0661 > 44**
Variance						
e.shhlw1	**1047.175**	**80.43302**			**900.8217**	**1217.3 > 06**
e.whpsociso	**220.0984**	**16.90566**			**189.3374**	**255.8 > 57**

LR test of model vs. saturated: chi2(**1**) = **1.64**, Prob > chi2 = **0.2010**

Endogenous variables

Observed: **shhlw1 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3507.0758**
Iteration 1: log likelihood = **-3507.0758**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3507.0758**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw1 <-						
crhtw2	**16.19799**	**1.904742**	**8.50**	**0.000**	**12.46476**	**19.931**
_cons	**37.38468**	**1.787859**	**20.91**	**0.000**	**33.88054**	**40.888**
whpsociso <-						
shhlw1	**.0134276**	**.0226619**	**0.59**	**0.554**	**-.0309889**	**.0578**
_cons	**5.868597**	**1.121218**	**5.23**	**0.000**	**3.671049**	**8.0661**
Variance						
e.shhlw1	**1041.951**	**80.03174**			**896.3275**	**1211.2**
e.whpsociso	**220.0984**	**16.90566**			**189.3374**	**255.8**

LR test of model vs. saturated: chi2(**1**) = **8.30**, Prob > chi2 = **0.0040**

Endogenous variables

Observed: **shhlw1 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3508.0489**
Iteration 1: log likelihood = **-3508.0489**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3508.0489**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw1 <-						
crhtw3	**15.92023**	**1.913789**	**8.32**	**0.000**	**12.16927**	**19.671**
_cons	**37.33765**	**1.794835**	**20.80**	**0.000**	**33.81983**	**40.855**
whpsociso <-						
shhlw1	**.0134276**	**.0226619**	**0.59**	**0.554**	**-.0309889**	**.0578**
_cons	**5.868597**	**1.121218**	**5.23**	**0.000**	**3.671049**	**8.0661**
Variance						
e.shhlw1	**1049.909**	**80.64303**			**903.1737**	**1220.4**
e.whpsociso	**220.0984**	**16.90566**			**189.3374**	**255.8**

LR test of model vs. saturated: chi2(**1**) = **8.08**, Prob > chi2 = **0.0045**

```
Endogenous variables

Observed:  shhlw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3568.5774
Iteration 1:   log likelihood = -3568.5774

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3568.5774

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  shhlw2 <-  |
       crhtw1 |   9.885255   2.247166     4.40   0.000     5.480891    14.289
> 62
        _cons |   46.47567    2.11061    22.02   0.000     42.33895    50.612
> 39
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       shhlw2 |    .021999   .0203777     1.08   0.280    -.0179406     .06193
> 86
        _cons |   5.339049   1.221161     4.37   0.000     2.945617     7.732
> 48
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.shhlw2 |   1475.559    113.337                      1269.335    1715.2
> 88
  e.whpsociso |   219.5715   16.86518                      188.8842    255.24
> 45
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      1.42, Prob > chi2 = 0.2330
```

Endogenous variables

Observed: **shhlw2 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3562.3959**
Iteration 1: log likelihood = **-3562.3959**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3562.3959**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw2 <-						
crhtw2	**11.51088**	**2.245057**	**5.13**	**0.000**	**7.110648**	**15.91111**
_cons	**47.18888**	**2.107292**	**22.39**	**0.000**	**43.05867**	**51.31909**
whpsociso <-						
shhlw2	**.021999**	**.0203777**	**1.08**	**0.280**	**-.0179406**	**.061938**
_cons	**5.339049**	**1.221161**	**4.37**	**0.000**	**2.945617**	**7.732481**
Variance						
e.shhlw2	**1447.537**	**111.1846**			**1245.229**	**1682.713**
e.whpsociso	**219.5715**	**16.86518**			**188.8842**	**255.2445**

LR test of model vs. saturated: chi2(**1**) = **7.15**, Prob > chi2 = **0.0075**

Endogenous variables

Observed: **shhlw2 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3562.369**
Iteration 1: log likelihood = **-3562.369**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3562.369**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw2 <-						
crhtw3	**11.39382**	**2.249076**	**5.07**	**0.000**	**6.985713**	**15.801**
_cons	**47.17026**	**2.109282**	**22.36**	**0.000**	**43.03614**	**51.304**
whpsociso <-						
shhlw2	**.021999**	**.0203777**	**1.08**	**0.280**	**-.0179406**	**.06193**
_cons	**5.339049**	**1.221161**	**4.37**	**0.000**	**2.945617**	**7.732**
Variance						
e.shhlw2	**1450.014**	**111.3749**			**1247.36**	**1685.5**
e.whpsociso	**219.5715**	**16.86518**			**188.8842**	**255.24**

LR test of model vs. saturated: chi2(**1**) = **6.99**, Prob > chi2 = **0.0082**

```
Endogenous variables

Observed:  shhousw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =  -3577.437
Iteration 1:   log likelihood =  -3577.437

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     =  -3577.437

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  shhousw2 <-|
       crhtw1|   11.95574   2.302876     5.19   0.000     7.442191     16.46
> 93
        _cons|   40.39825   2.162934    18.68   0.000     36.15897    44.637
> 52
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     shhousw2|   .0043029   .0197095     0.22   0.827     -.034327     .04293
> 29
        _cons|   6.164041   1.109781     5.55   0.000     3.988911    8.3391
> 71
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.shhousw2|   1549.627   119.0262                      1333.051     1801.
> 39
   e.whpsociso|   220.2954   16.92079                      189.5069     256.0
> 86
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      1.97, Prob > chi2 = 0.1607
```

Endogenous variables

Observed: **shhousw2 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3566.9124**
Iteration 1: log likelihood = **-3566.9124**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3566.9124**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
shhousw2 <-					
crhtw2	**15.01884**	**2.271427**	**6.61**	**0.000**	**10.56692** **19.470**
_cons	**41.46269**	**2.132043**	**19.45**	**0.000**	**37.28396** **45.641**
whpsociso <-					
shhousw2	**.0043029**	**.0197095**	**0.22**	**0.827**	**-.034327** **.04293**
_cons	**6.164041**	**1.109781**	**5.55**	**0.000**	**3.988911** **8.3391**
Variance					
e.shhousw2	**1481.741**	**113.8119**			**1274.653** **1722.4**
e.whpsociso	**220.2954**	**16.92079**			**189.5069** **256.0**

LR test of model vs. saturated: chi2(**1**) = **8.80**, Prob > chi2 = **0.0030**

Endogenous variables

Observed: **shhousw2 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3566.867**
Iteration 1: log likelihood = **-3566.867**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-3566.867**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhousw2 <-						
crhtw3	**14.93921**	**2.27537**	**6.57**	**0.000**	**10.47957**	**19.398**
_cons	**41.45187**	**2.133941**	**19.43**	**0.000**	**37.26942**	**45.634**
whpsociso <-						
shhousw2	**.0043029**	**.0197095**	**0.22**	**0.827**	**-.034327**	**.04293**
_cons	**6.164041**	**1.109781**	**5.55**	**0.000**	**3.988911**	**8.3391**
Variance						
e.shhousw2	**1484.115**	**113.9942**			**1276.695**	**1725.2**
e.whpsociso	**220.2954**	**16.92079**			**189.5069**	**256.0**

LR test of model vs. saturated: chi2(**1**) = **8.60**, Prob > chi2 = **0.0034**

```
Endogenous variables

Observed:  suprtw3 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3579.2666
Iteration 1:   log likelihood = -3579.2666

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3579.2666

------------------------------------------------------------------------------
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> --
Structural   |
  suprtw3 <- |
       crhtw1 |  -.3075828   2.378134    -0.13   0.897     -4.96864    4.3534
> 74
       _cons |   65.06838    2.23362    29.13   0.000     60.69057    69.446
> 19
-------------+----------------------------------------------------------------
> --
  whpsociso <- |
     suprtw3 |   -.083459   .0193059    -4.32   0.000    -.1212979     -.045
> 62
       _cons |   11.76475    1.48194     7.94   0.000     8.860198     14.66
> 93
-------------+----------------------------------------------------------------
> --
Variance     |
    e.suprtw3 |   1652.567   126.9329                      1421.604    1921.0
> 53
   e.whpsociso |    208.815   16.03898                       179.631    242.74
> 04
------------------------------------------------------------------------------
> --
LR test of model vs. saturated: chi2(1)   =      2.01, Prob > chi2 = 0.1564
```

```
Endogenous variables

Observed:  suprtw3 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3575.6151
Iteration 1:   log likelihood = -3575.6151

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3575.6151

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  suprtw3 <- |
       crhtw2 |   2.892019     2.3937     1.21   0.227    -1.799546    7.5835
> 85
        _cons |   65.64425   2.246813    29.22   0.000     61.24057    70.047
> 92
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
     suprtw3 |   -.083459   .0193059    -4.32   0.000    -.1212979     -.045
> 62
        _cons |   11.76475    1.48194     7.94   0.000     8.860198     14.66
> 93
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.suprtw3 |   1645.563   126.3949                      1415.579    1912.9
> 11
   e.whpsociso |    208.815   16.03898                      179.631    242.74
> 04
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     10.49, Prob > chi2 = 0.0012
```

```
Endogenous variables

Observed:  suprtw3 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3574.6819
Iteration 1:   log likelihood = -3574.6819

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -3574.6819

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  suprtw3 <- |
        crhtw3 |   3.930041   2.391583     1.64   0.100    -.7573759    8.6174
> 58
         _cons |   65.83626   2.242932    29.35   0.000     61.44019    70.232
> 32
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       suprtw3 |  -.083459   .0193059    -4.32   0.000    -.1212979     -.045
> 62
         _cons |   11.76475    1.48194     7.94   0.000     8.860198     14.66
> 93
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.suprtw3 |   1639.588    125.936                      1410.439    1905.9
> 66
    e.whpsociso |    208.815   16.03898                       179.631    242.74
> 04
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     11.01, Prob > chi2 = 0.0009
```

Endogenous variables

Observed: **icdx4nr9 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1341.3851**
Iteration 1: log likelihood = **-1341.3851**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1341.3851**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx4nr9 <-						
crhtw1	**-.0005647**	**.0031725**	**-0.18**	**0.859**	**-.0067826**	**.00565**
_cons	**.0028696**	**.0029797**	**0.96**	**0.336**	**-.0029705**	**.00870**
whpsociso <-						
icdx4nr9	**35.91538**	**14.7368**	**2.44**	**0.015**	**7.031795**	**64.798**
_cons	**6.224615**	**.8003929**	**7.78**	**0.000**	**4.655874**	**7.7933**
Variance						
e.icdx4nr9	**.0029409**	**.0002259**			**.0025299**	**.00341**
e.whpsociso	**216.5325**	**16.63176**			**186.2699**	**251.71**

LR test of model vs. saturated: chi2(**1**) = **2.09**, Prob > chi2 = **0.1484**

Endogenous variables

Observed: **icdx4nr9 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1337.3395**
Iteration 1: log likelihood = **-1337.3395**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1337.3395**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx4nr9 <-						
crhtw2	.0048025	.0031895	1.51	0.132	-.0014488	.01105
_cons	.0038336	.0029938	1.28	0.200	-.0020342	.00970
whpsociso <-						
icdx4nr9	35.91538	14.7368	2.44	0.015	7.031795	64.798
_cons	6.224615	.8003929	7.78	0.000	4.655874	7.7933
Variance						
e.icdx4nr9	.0029216	.0002244			.0025133	.00339
e.whpsociso	216.5325	16.63176			186.2699	251.71

LR test of model vs. saturated: chi2(**1**) = **7.27**, Prob > chi2 = **0.0070**

Endogenous variables

Observed: **icdx4nr9 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-1337.0776**
Iteration 1: log likelihood = **-1337.0776**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1337.0776**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx4nr9 <-						
crhtw3	.0046896	.003193	1.47	0.142	-.0015685	.01094
_cons	.003814	.0029945	1.27	0.203	-.0020552	.00968
whpsociso <-						
icdx4nr9	35.91538	14.7368	2.44	0.015	7.031795	64.798
_cons	6.224615	.8003929	7.78	0.000	4.655874	7.7933
Variance						
e.icdx4nr9	.0029226	.0002245			.0025141	.00339
e.whpsociso	216.5325	16.63176			186.2699	251.71

LR test of model vs. saturated: chi2(**1**) = **7.13**, Prob > chi2 = **0.0076**

```
Endogenous variables

Observed:  icdx4nr10 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1455.3998
Iteration 1:   log likelihood = -1455.3998

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -1455.3998

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx4nr10 <-
       crhtw1 |  -.0007924   .0044799    -0.18   0.860    -.0095728     .0079
> 88
        _cons |   .0057871   .0042077     1.38   0.169    -.0024598    .01403
> 39
-------------+----------------------------------------------------------------
> ──
  whpsociso <-
     icdx4nr10 |   35.89622   10.34485     3.47   0.001     15.62068    56.171
> 75
        _cons |   6.118783   .7945833     7.70   0.000     4.561429    7.6761
> 38
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx4nr10 |   .0058644   .0004504                      .0050448    .00681
> 71
   e.whpsociso |   212.7692    16.3427                      183.0326     247.3
> 37
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      2.15, Prob > chi2 = 0.1422
```

Endogenous variables

Observed: **icdx4nr10 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1452.3049**
Iteration 1: log likelihood = **-1452.3049**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1452.3049**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx4nr10 <-						
crhtw2	.0027026	.0045166	0.60	0.550	-.0061498	.0115
_cons	.006397	.0042395	1.51	0.131	-.0019122	.01470
whpsociso <-						
icdx4nr10	35.89622	10.34485	3.47	0.001	15.62068	56.171
_cons	6.118783	.7945833	7.70	0.000	4.561429	7.6761
Variance						
e.icdx4nr10	.0058587	.00045			.0050399	.00681
e.whpsociso	212.7692	16.3427			183.0326	247.3

LR test of model vs. saturated: chi2(**1**) = **7.85,** Prob > chi2 = **0.0051**

Endogenous variables

Observed: **icdx4nr10 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-1451.9661**
Iteration 1: log likelihood = **-1451.9661**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1451.9661**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx4nr10 <-						
crhtw3	**.0028678**	**.0045205**	**0.63**	**0.526**	**-.0059923**	**.01172**
_cons	**.0064281**	**.0042396**	**1.52**	**0.129**	**-.0018813**	**.01473**
whpsociso <-						
icdx4nr10	**35.89622**	**10.34485**	**3.47**	**0.001**	**15.62068**	**56.171**
_cons	**6.118783**	**.7945833**	**7.70**	**0.000**	**4.561429**	**7.6761**
Variance						
e.icdx4nr10	**.0058579**	**.0004499**			**.0050392**	**.00680**
e.whpsociso	**212.7692**	**16.3427**			**183.0326**	**247.3**

LR test of model vs. saturated: chi2(**1**) = **7.65,** Prob > chi2 = **0.0057**

```
Endogenous variables

Observed:  icdx7nr21 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1341.9036
Iteration 1:   log likelihood = -1341.9036

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -1341.9036

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  icdx7nr21 <-
       crhtw1 |  -.0017145   .0031712    -0.54   0.589      -.00793     .0045
> 01
        _cons |   .0027062   .0029785     0.91   0.364    -.0031316     .0085
> 44
-------------+----------------------------------------------------------------
> ----
  whpsociso <-
     icdx7nr21 |   31.74308   14.76502     2.15   0.032     2.804166    60.681
> 99
        _cons |   6.236923   .8019259     7.78   0.000     4.665177    7.8086
> 69
-------------+----------------------------------------------------------------
> ----
Variance     |
   e.icdx7nr21 |   .0029386   .0002257                      .0025279     .0034
> 16
   e.whpsociso |   217.3628   16.69553                      186.9841    252.67
> 69
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      2.20, Prob > chi2 = 0.1381
```

```
Endogenous variables

Observed:  icdx7nr21 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -1338.8723
Iteration 1:   log likelihood = -1338.8723

Structural equation model                       Number of obs      =       339
Estimation method  = ml
Log likelihood     = -1338.8723

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx7nr21 <-
       crhtw2 |  -.0022428   .0031978    -0.70   0.483    -.0085104    .00402
> 49
        _cons |   .0025372   .0030016     0.85   0.398    -.0033459    .00842
> 02
-------------+----------------------------------------------------------------
> ──
  whpsociso <-
     icdx7nr21 |   31.74308   14.76502     2.15   0.032     2.804166    60.681
> 99
        _cons |   6.236923   .8019259     7.78   0.000     4.665177    7.8086
> 69
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx7nr21 |   .0029369   .0002256                      .0025264     .0034
> 14
   e.whpsociso |   217.3628   16.69553                      186.9841    252.67
> 69
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      8.82, Prob > chi2 = 0.0030
```

Endogenous variables

Observed: **icdx7nr21 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-1338.1834**
Iteration 1: log likelihood = **-1338.1834**

Structural equation model Number of obs = **339**
Estimation method = **ml**
Log likelihood = **-1338.1834**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx7nr21 <-						
crhtw3	-.003558	.0031973	-1.11	0.266	-.0098246	.00270
_cons	.0022942	.0029986	0.77	0.444	-.0035829	.00817
whpsociso <-						
icdx7nr21	31.74308	14.76502	2.15	0.032	2.804166	60.681
_cons	6.236923	.8019259	7.78	0.000	4.665177	7.8086
Variance						
e.icdx7nr21	.0029304	.0002251			.0025209	.00340
e.whpsociso	217.3628	16.69553			186.9841	252.67

LR test of model vs. saturated: chi2(**1**) = **8.95**, Prob > chi2 = **0.0028**

```
66 .
67 . * Possible male sociso indirect effects ----------------------------------
   > ----
68 . *-+- Possible indirect effects through
69 . * wave 1 age BSIphanx BSIdep
70 . * wave 2 age BSIphanx BSIdep BSIips
71 . * wave 3 age BSIphanx BSIdep BSIips
72 . *------------------------------------------------------------------------
   > -
73 .
74 .
75 .
76 . ****  WHPsocial model for females--------
77 .
78 . /*
   > EQ(10) Modelling WHPsociso by OLS-CS
   >        The dataset is: /Users/robertyaffee/Documents/data/research/chwk/
   >        phase3/data/ox/workingdatasets/MARS/gals.dta
   >        The estimation sample is: 1 - 340
   >        Dropped 1 observation(s) with missing values from the sample
   >
   >                   Coefficient  Std.Error      HACSE  t-HACSE  t-prob Part.R^
   > 2
   > BSIdep                1.98052     0.2300     0.2553     7.76  0.0000   0.154
   > 6
   > emplw25               11.6286      3.433      4.167     2.79  0.0056   0.023
   > 1
   > emplw33              -8.64387      15.89      1.215    -7.12  0.0000   0.133
   > 4
   > shhlw2               0.0501462    0.02331    0.01931     2.60  0.0098   0.020
   > 1
   > shrelaw2            -0.0787617    0.02919    0.02541    -3.10  0.0021   0.028
   > 4
   > suprtw3             -0.0484711    0.02013    0.01906    -2.54  0.0114   0.019
   > 3
   > mhlthw1              -0.109619    0.02841    0.02414    -4.54  0.0000   0.059
   > 0
   > radhw1       U    0.00467289    0.03571    0.06268   0.0745  0.9406   0.0000
   > radhw2       U    -0.0239948    0.08185    0.09648   -0.249  0.8037   0.0002
   > radhw3       U     0.0621300    0.06962    0.05309     1.17  0.2428   0.0041
   >
   > sigma                 15.8222  RSS                82362.0793
   > log-likelihood       -1412.06
   > no. of observations       339  no. of parameters          10
   > mean(WHPsociso)       10.3104  se(WHPsociso)          18.987
   > When the log-likelihood constant is NOT included:
   > AIC                   5.55188  SC                    5.66474
   > HQ                    5.59685  FPE                   257.725
   > When the log-likelihood constant is included:
```

```
   > AIC                  8.38975  SC                   8.50262
   > HQ                   8.43473  FPE                  4401.81
   >
   > Normality test:   Chi^2(2)  =   208.67 [0.0000]**
   > Hetero test:      F(17,320) =   1.9160 [0.0162]*
   > Hetero-X test:    F(45,292) =   2.4290 [0.0000]**
   > RESET23 test:     F(2,327)  =   3.8837 [0.0215]*
   > */
79 .
80 .
81 . /* candiate illnesses for females social isolation model
   >
   > foreach i in 7 {
   > foreach j in 1 5 6 {
   > foreach k in 3 {
   > foreach m in 2 {
   > foreach n in 4 {
   > regress whpsociso icdx`i'nr1-icdx`i'nr28 if gender==2
   > regress whpsociso icdx`j'nr1-icdx`j'nr18 if gender==2
   > regress whpsociso icdx`k'nr1-icdx`k'nr11 if gender==2
   > regress whpsociso icdx`m'nr1-icdx`m'nr8 if gender==2
   > regress whpsociso icdx`n'nr1-icdx`n'nr20 if gender==2
   > }
   > }
   > }
   > }
   > }
   > */
82 . des icdx1nr12 icdx5nr4 icdx6nr3 icdx6nr11 icdx6nr12 icdx6nr15  icdx7nr26

              storage  display     value
   variable name   type   format      label      variable label
   ------------------------------------------------------------------------------
   icdx1nr12       double %8.0g                  icdx1nr==531 gastric ulcer
   icdx5nr4        double %8.0g                  icdx5nr==rheum fev w/o hrt
                                                   involv
   icdx6nr3        double %8.0g                  icdx6nr==290.12 presenile
                                                   delusion
   icdx6nr11       double %8.0g                  icdx6nr==regional enteritis
   icdx6nr12       double %8.0g                  icdx6nr==575.1 cholecystitis
   icdx6nr15       double %8.0g                  icdx6nr==renal/ureteral calculus
   icdx7nr26       double %8.0g                  icdx7nr==intervertebral disc
                                                   dis*
```

```
83 .
84 .
85 . // Full female social isolation crhtw model
86 . cap drop H8FemSIpred

87 . cap drop h8sepred

88 . cap drop rsires

89 . cap drop upb

90 . cap drop lpb

91 . regress WHPsociso age BSIdep BSIphanx  sepaw2  WHPel WHPpa ///
   >      emplw25 emplw33 deaw2 shhlw2  shfincw2 suprtw3  ///
   >      medcow3 illw3 crhtw1-crhtw3 ///
   >       icdx1nr12 icdx5nr4 icdx6nr3 icdx6nr11 icdx6nr12 icdx6nr15  ///
   >       icdx7nr26 if gender==2, vce(cluster id)
   note: icdx6nr15 omitted because of collinearity

   Linear regression                               Number of obs =     360
                                                   F( 19,   359) =       .
                                                   Prob > F      =       .
                                                   R-squared     =  0.5403
                                                   Root MSE      =  13.137

                                        (Std. Err. adjusted for 360 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   WHPsociso |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |    .024209   .0676914     0.36   0.721    -.1089126    .1573306
       BSIdep |    1.750715   .3045235     5.75   0.000     1.151841    2.349589
    BSIphanx |   -.6495127   .2940894    -2.21   0.028    -1.227867   -.0711582
      sepaw2 |   -2.974313   1.879647    -1.58   0.114    -6.670816    .7221899
       WHPel |    .1163641   .0279075     4.17   0.000     .0614814    .1712468
       WHPpa |     .168509   .0576397     2.92   0.004     .0551552    .2818628
     emplw25 |    3.406403   3.911469     0.87   0.384    -4.285868    11.09867
     emplw33 |    -10.7925    2.64895    -4.07   0.000     -16.0019   -5.583087
       deaw2 |   -1.868149    .795226    -2.35   0.019    -3.432036   -.3042626
      shhlw2 |    .0091588   .0191738     0.48   0.633    -.0285483    .0468659
    shfincw2 |   -.043186   .0216453    -2.00   0.047    -.0857536   -.0006185
      suprtw3 |   -.0352258   .0186659    -1.89   0.060    -.0719341    .0014826
     medcow3 |   -.344872   .1474924    -2.34   0.020    -.6349297   -.0548144
       illw3 |    .4139756   .8526396     0.49   0.628     -1.26282    2.090771
      crhtw1 |    2.024705   1.636498     1.24   0.217    -1.193623    5.243032
      crhtw2 |   -1.197136     2.7383    -0.44   0.662    -6.582259    4.187988
      crhtw3 |    .6225015   2.005859     0.31   0.756    -3.322208    4.567211
   icdx1nr12 |     12.4498   11.33264     1.10   0.273    -9.836902    34.73651
```

icdx5nr4	**31.75689**	**4.967516**	**6.39**	**0.000**	**21.9878**	**41.52597**
icdx6nr3	**48.86768**	**10.07196**	**4.85**	**0.000**	**29.06023**	**68.67513**
icdx6nr11	**30.73035**	**13.16401**	**2.33**	**0.020**	**4.842092**	**56.61862**
icdx6nr12	**51.71199**	**4.958484**	**10.43**	**0.000**	**41.96067**	**61.46332**
icdx6nr15	**0**	(omitted)				
icdx7nr26	**21.79048**	**5.815167**	**3.75**	**0.000**	**10.35441**	**33.22655**
_cons	**-6.276913**	**3.861783**	**-1.63**	**0.105**	**-13.87147**	**1.317646**

```
 92 .
 93 .
 94 . // Trimmed female social isolation crhtw model
 95 . des icdx1nr12 icdx5nr4 icdx6nr3 icdx6nr11 icdx6nr12 icdx7nr26
```

variable name	storage type	display format	value label	variable label
icdx1nr12	double	%8.0g		**icdx1nr==531 gastric ulcer**
icdx5nr4	double	%8.0g		**icdx5nr==rheum fev w/o hrt involv**
icdx6nr3	double	%8.0g		**icdx6nr==290.12 presenile delusion**
icdx6nr11	double	%8.0g		**icdx6nr==regional enteritis**
icdx6nr12	double	%8.0g		**icdx6nr==575.1 cholecystitis**
icdx7nr26	double	%8.0g		**icdx7nr==intervertebral disc dis***

```
 96 . cap drop H8FemSIpred

 97 . cap drop h8sepred

 98 . cap drop rsires

 99 . cap drop upb

100 . cap drop lpb
```

```
101 . regress WHPsociso age BSIdep BSIphanx  sepaw2  WHPel WHPpa ///
    >       emplw25 emplw33 deaw2 shhlw2  shfincw2 suprtw3  ///
    >       medcow3 illw3 crhtw1-crhtw3 ///
    >        icdx1nr12 icdx5nr4 icdx6nr3 icdx6nr11 icdx6nr12  ///
    >        icdx7nr26 if gender==2, vce(cluster id)
```

Linear regression

Number of obs =	**360**
F(19, 359) =	**.**
Prob > F =	**.**
R-squared =	**0.5403**
Root MSE =	**13.137**

(Std. Err. adjusted for **360** clusters in id)

WHPsociso	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
age	.024209	.0676914	0.36	0.721	-.1089126	.1573306
BSIdep	1.750715	.3045235	5.75	0.000	1.151841	2.349589
BSIphanx	-.6495127	.2940894	-2.21	0.028	-1.227867	-.0711582
sepaw2	-2.974313	1.879647	-1.58	0.114	-6.670816	.7221899
WHPel	.1163641	.0279075	4.17	0.000	.0614814	.1712468
WHPpa	.168509	.0576397	2.92	0.004	.0551552	.2818628
emplw25	3.406403	3.911469	0.87	0.384	-4.285868	11.09867
emplw33	-10.7925	2.64895	-4.07	0.000	-16.0019	-5.583087
deaw2	-1.868149	.795226	-2.35	0.019	-3.432036	-.3042626
shhlw2	.0091588	.0191738	0.48	0.633	-.0285483	.0468659
shfincw2	-.043186	.0216453	-2.00	0.047	-.0857536	-.0006185
suprtw3	-.0352258	.0186659	-1.89	0.060	-.0719341	.0014826
medcow3	-.344872	.1474924	-2.34	0.020	-.6349297	-.0548144
illw3	.4139756	.8526396	0.49	0.628	-1.26282	2.090771
crhtw1	2.024705	1.636498	1.24	0.217	-1.193623	5.243032
crhtw2	-1.197136	2.7383	-0.44	0.662	-6.582259	4.187988
crhtw3	.6225015	2.005859	0.31	0.756	-3.322208	4.567211
icdx1nr12	12.4498	11.33264	1.10	0.273	-9.836902	34.73651
icdx5nr4	31.75689	4.967516	6.39	0.000	21.9878	41.52597
icdx6nr3	48.86768	10.07196	4.85	0.000	29.06023	68.67513
icdx6nr11	30.73035	13.16401	2.33	0.020	4.842092	56.61862
icdx6nr12	51.71199	4.958484	10.43	0.000	41.96067	61.46332
icdx7nr26	21.79048	5.815167	3.75	0.000	10.35441	33.22655
_cons	-6.276913	3.861783	-1.63	0.105	-13.87147	1.317646

```
102 .       di e(r2_a)
    .5088808

103 .  *-+- No threat social isolation relationship for women
104 .      predict H8FemSIpred if gender==2, xb
    (342 missing values generated)

105 .      predict h8sepred if gender==2, stdp
    (343 missing values generated)

106 .      predict rsires if gender==2, residual
    (342 missing values generated)

107 .      gen upb = H8FemSIpred + 1.96*h8sepred
    (343 missing values generated)

108 .      gen lpb = H8FemSIpred - 1.96*h8sepred
    (343 missing values generated)

109 .
110 . scatter H8FemSIpred rsires || lowess H8FemSIpred  rsires  ///
    >   || lowess upb rsires || lowess lpb rsires, ///
    >   title(Prediction interval of Female social isolation model)   ///
    >   ytitle(Predicted Female Social Isolation)

111 .
112 . gr save FemSocIsoPredInt.gph, replace
    (file FemSocIsoPredInt.gph saved)

113 . gr export FemSocIsoPredInt.eps, replace
    (file FemSocIsoPredInt.eps written in EPS format)

114 . gr use  FemsocIsoPredInt.gph

115 .
116 . // No significant main effects for risk perception vs. female social isolati
    > on
```

```
117 .
118 .
119 .
120 . title "tests for possible indirect effects for female social isolation model
    > "


    ********************************************************************************
    > *
    ********************************************************************************
    > *
    *****                                                                      ****
    > *
    *****                                                                      ****
    > *
    *****tests for possible indirect effects for female social isolation model****
    > *
    *****                                                                      ****
    > *
    *****                                                                      ****
    > *
    *****                                          13 Jul 2012    12:42:37  ****
    > *
    ********************************************************************************
    > *
    ********************************************************************************
    > *



121 . set more off

122 . foreach var in age BSIdep BSIphanx  sepaw2  WHPel WHPpa ///
    >      emplw25 emplw33 deaw2 shhlw2  shfincw2 suprtw3  ///
    >      medcow3 illw3 ///
    >       icdx1nr12 icdx5nr4 icdx6nr3 icdx6nr11 icdx6nr12  ///
    >       icdx7nr26 {
      2. sem (crhtw1-> `var')(`var'-> whpsociso) if gender==2, nocapslatent iterat
    > e(50)
      3. sem (crhtw2-> `var')(`var'-> whpsociso) if gender==2, nocapslatent iterat
    > e(50)
      4. sem (crhtw3-> `var')(`var'-> whpsociso) if gender==2, nocapslatent iterat
    > e(50)
      5. }
    (1 observations with missing values excluded;
     specify option 'method(mlmv)' to use all observations)

    Endogenous variables
```

Observed: **age whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-3443.4948**
Iteration 1: log likelihood = **-3443.4948**

Structural equation model Number of obs = **362**
Estimation method = **ml**
Log likelihood = **-3443.4948**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
age <-					
crhtw1	**3.218873**	**.6364183**	**5.06**	**0.000**	**1.971516** **4.466**
_cons	**49.84232**	**.6063362**	**82.20**	**0.000**	**48.65393** **51.030**
whpsociso <-					
age	**.5037277**	**.079073**	**6.37**	**0.000**	**.3487474** **.65870**
_cons	**-15.0135**	**4.083459**	**-3.68**	**0.000**	**-23.01693** **-7.0100**
Variance					
e.age	**130.49**	**9.699243**			**112.7997** **150.95**
e.whpsociso	**316.2253**	**23.50484**			**273.3552** **365.81**

LR test of model vs. saturated: chi2(**1**) = **3.30**, Prob > chi2 = **0.0693**

Endogenous variables

Observed: **age whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3420.9216**
Iteration 1: log likelihood = **-3420.9216**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3420.9216**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
age <-					
crhtw2	**3.897443**	**.6851925**	**5.69**	**0.000**	**2.554491** **5.2403**
_cons	**49.54513**	**.6075589**	**81.55**	**0.000**	**48.35434** **50.735**
whpsociso <-					
age	**.5037666**	**.0786461**	**6.41**	**0.000**	**.3496232** **.65791**
_cons	**-15.01573**	**4.057702**	**-3.70**	**0.000**	**-22.96868** **-7.0627**
Variance					
e.age	**128.9608**	**9.57237**			**111.5002** **149.15**
e.whpsociso	**315.3542**	**23.40778**			**272.6569** **364.73**

LR test of model vs. saturated: chi2(**1**) = **9.45**, Prob > chi2 = **0.0021**

Endogenous variables

```
Observed:  age whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3430.4987
Iteration 1:   log likelihood = -3430.4987

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3430.4987

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  age <-     |
       crhtw3 |   3.646918   .6723377     5.42   0.000      2.32916     4.9646
> 75
       _cons |   49.58731   .6093473    81.38   0.000     48.39301     50.781
> 61
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
         age |   .5037666   .0786461     6.41   0.000     .3496232     .65791
> 01
       _cons | -15.01573   4.057702    -3.70   0.000    -22.96868    -7.0627
> 75
-------------+----------------------------------------------------------------
> ──
Variance     |
        e.age |   129.9244   9.643895                      112.3333     150.27
> 02
   e.whpsociso |   315.3542   23.40778                      272.6569     364.73
> 77
-------------+----------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     11.80, Prob > chi2 = 0.0006
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

Endogenous variables

Observed: **BSIdep whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-3002.9885**
Iteration 1: log likelihood = **-3002.9885**

Structural equation model Number of obs = **362**
Estimation method = **ml**
Log likelihood = **-3002.9885**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
BSIdep <-					
crhtw1	**.3880135**	**.2084177**	**1.86**	**0.063**	**-.0204776** **.79650**
_cons	**9.614106**	**.1985662**	**48.42**	**0.000**	**9.224923** **10.003**
whpsociso <-					
BSIdep	**2.56645**	**.2248657**	**11.41**	**0.000**	**2.125721** **3.0071**
_cons	**-14.4974**	**2.332057**	**-6.22**	**0.000**	**-19.06815** **-9.9266**
Variance					
e.BSIdep	**13.99461**	**1.040211**			**12.09739** **16.189**
e.whpsociso	**258.6155**	**19.22274**			**223.5554** **299.1**

LR test of model vs. saturated: chi2(**1**) = **7.08**, Prob > chi2 = **0.0078**

Endogenous variables

Observed: **BSIdep whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-2967.9013**
Iteration 1: log likelihood = **-2967.9013**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-2967.9013**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
BSIdep <-					
crhtw2	**1.222397**	**.2175138**	**5.62**	**0.000**	**.7960774** **1.6487**
_cons	**9.445589**	**.192869**	**48.97**	**0.000**	**9.067572** **9.8236**
whpsociso <-					
BSIdep	**2.567092**	**.2242632**	**11.45**	**0.000**	**2.127545** **3.006**
_cons	**-14.50609**	**2.323675**	**-6.24**	**0.000**	**-19.0604** **-9.9517**
Variance					
e.BSIdep	**12.99589**	**.9646457**			**11.23632** **15.031**
e.whpsociso	**257.9052**	**19.14352**			**222.9862** **298.29**

LR test of model vs. saturated: chi2(**1**) = **4.48**, Prob > chi2 = **0.0343**

```
Endogenous variables

Observed:  BSIdep whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2971.3925
Iteration 1:   log likelihood = -2971.3925

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2971.3925

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  BSIdep <-  |
       crhtw3 |   1.360398   .2098845     6.48   0.000     .9490322    1.7717
> 64
        _cons |   9.421549   .1902207    49.53   0.000     9.048723    9.7943
> 75
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       BSIdep |   2.567092   .2242632    11.45   0.000     2.127545     3.006
> 64
        _cons |  -14.50609   2.323675    -6.24   0.000     -19.0604   -9.9517
> 65
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.BSIdep |   12.66125   .9398062                      10.94698    14.643
> 97
   e.whpsociso |   257.9052   19.14352                      222.9862    298.29
> 25
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =      3.95, Prob > chi2 = 0.0469
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -2996.6209
Iteration 1:   log likelihood = -2996.6209

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -2996.6209

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  BSIphanx <-|
       crhtw1|  -.0345343   .1807946    -0.19   0.849    -.3888852    .31981
> 65
       _cons |   7.714541   .1722488    44.79   0.000     7.376939    8.0521
> 42
-------------+----------------------------------------------------------------
> ----
  whpsociso <-|
    BSIphanx |    1.37381   .2950052     4.66   0.000     .7956104     1.952
> 01
       _cons |  -.2827456   2.467753    -0.11   0.909    -5.119452    4.5539
> 61
------------------------------------------------------------------------------
> ----
Variance     |
    e.BSIphanx|   10.53083   .7827503                      9.103182    12.182
> 37
   e.whpsociso|   331.7984   24.66238                      286.8171    383.83
> 42
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =     11.43, Prob > chi2 = 0.0007
```

```
Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2967.0793
Iteration 1:   log likelihood = -2967.0793

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2967.0793

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  BSIphanx <-|
       crhtw2|   .7650516   .1915655     3.99   0.000     .3895902    1.1405
> 13
       _cons |   7.571012   .1698607    44.57   0.000     7.238091    7.9039
> 33
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     BSIphanx|    1.37847    .294369     4.68   0.000     .8015172    1.9554
> 22
       _cons |  -.3367808   2.460249    -0.14   0.891     -5.15878    4.4852
> 19
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.BSIphanx|   10.08015   .7482189                     8.715351    11.658
> 67
   e.whpsociso|   331.0033   24.56937                     286.1872    382.83
> 75
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     14.46, Prob > chi2 = 0.0001
```

```
Endogenous variables

Observed:  BSIphanx whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2972.2093
Iteration 1:   log likelihood = -2972.2093

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2972.2093

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  BSIphanx <-|
       crhtw3|   .8801626   .1856828     4.74   0.000      .516231    1.2440
> 94
       _cons |    7.55102   .1682864    44.87   0.000     7.221185    7.8808
> 56
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     BSIphanx|    1.37847    .294369     4.68   0.000     .8015172    1.9554
> 22
       _cons |  -.3367808   2.460249    -0.14   0.891     -5.15878    4.4852
> 19
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.BSIphanx|   9.909664   .7355643                     8.567948    11.461
> 49
   e.whpsociso|   331.0033   24.56937                     286.1872    382.83
> 75
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     15.49, Prob > chi2 = 0.0001
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

Endogenous variables

Observed: **sepaw2 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1885.1748**
Iteration 1: log likelihood = **-1885.1748**

Structural equation model Number of obs = **362**
Estimation method = **ml**
Log likelihood = **-1885.1748**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
sepaw2 <-						
crhtw1	.0142735	.0081557	1.75	0.080	-.0017115	.03025
_cons	.0201998	.0077702	2.60	0.009	.0049705	.03542
whpsociso <-						
sepaw2	-4.915381	6.699714	-0.73	0.463	-18.04658	8.2158
_cons	10.41788	.9959717	10.46	0.000	8.465813	12.369
Variance						
e.sepaw2	.0214297	.0015929			.0185245	.02479
e.whpsociso	351.1537	26.10105			303.5484	406.22

LR test of model vs. saturated: chi2(**1**) = **11.03**, Prob > chi2 = **0.0009**

```
Endogenous variables

Observed:  sepaw2 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -1861.3544
Iteration 1:   log likelihood = -1861.3544

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1861.3544

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  sepaw2 <-  |
      crhtw2 |   .0065809   .0088513     0.74   0.457    -.0107673    .02392
> 91
       _cons |   .0209077   .0078484     2.66   0.008     .0055251    .03629
> 03
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
      sepaw2 |  -4.886035   6.693119    -0.73   0.465    -18.00431    8.2322
> 37
       _cons |   10.38854   .9936198    10.46   0.000     8.441076    12.335
> 99
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.sepaw2|   .0215201   .0015974                     .0186064    .02489
> 01
  e.whpsociso|   350.4845    26.0154                     303.0307    405.36
> 93
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     21.28, Prob > chi2 = 0.0000
```

```
Endogenous variables

Observed:  sepaw2 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1869.3798
Iteration 1:   log likelihood = -1869.3798

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1869.3798

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  sepaw2 <-  |
       crhtw3 |   .0084506   .0086482     0.98   0.328    -.0084995    .02540
> 07
        _cons |   .0205844   .0078379     2.63   0.009     .0052223    .03594
> 64
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       sepaw2 |  -4.886035   6.693119    -0.73   0.465    -18.00431    8.2322
> 37
        _cons |   10.38854   .9936198    10.46   0.000     8.441076    12.335
> 99
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.sepaw2 |   .0214963   .0015956                     .0185858    .02486
> 26
   e.whpsociso |   350.4845    26.0154                     303.0307    405.36
> 93
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     23.96, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  WHPel whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3811.0355
Iteration 1:   log likelihood = -3811.0355

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -3811.0355

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  WHPel <-   |
       crhtw1 |   3.589837   1.907334     1.88   0.060    -.1484685    7.3281
> 43
        _cons |    31.4471   1.817179    17.31   0.000     27.88549     35.00
> 87
  ───────────+────────────────────────────────────────────────────────────────
> ──
  whpsociso <-|
        WHPel |   .2655266   .0250216    10.61   0.000     .2164853     .3145
> 68
        _cons |   1.832353   1.174339     1.56   0.119    -.4693083    4.1340
> 15
------------------------------------------------------------------------------
> ──
Variance     |
      e.WHPel |   1172.048   87.11763                      1013.155    1355.8
> 59
   e.whpsociso |   268.2327   19.93758                      231.8689    310.29
> 95
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      7.08, Prob > chi2 = 0.0078
```

```
Endogenous variables

Observed:  WHPel whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3784.2208
Iteration 1:   log likelihood = -3784.2208

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3784.2208

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  WHPel <-   |
      crhtw2 |   8.743494   2.023951     4.32   0.000     4.776623    12.710
> 37
       _cons |   30.33442   1.794634    16.90   0.000       26.817    33.851
> 84
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
      WHPel |   .2656625   .0249579    10.64   0.000     .2167459     .31457
> 91
       _cons |   1.822981   1.169737     1.56   0.119    -.4696618    4.1156
> 23
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.WHPel |   1125.208   83.52074                      972.8604    1301.4
> 12
  e.whpsociso |    267.503   19.85593                      231.2845    309.39
> 32
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      8.42, Prob > chi2 = 0.0037
```

```
Endogenous variables

Observed:  WHPel whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3789.8077
Iteration 1:   log likelihood = -3789.8077

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3789.8077

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  WHPel <-   |
       crhtw3 |   9.673408   1.964269     4.92   0.000      5.82351    13.523
> 31
        _cons |   30.17231    1.78024    16.95   0.000      26.6831    33.661
> 51
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
        WHPel |   .2656625   .0249579    10.64   0.000     .2167459    .31457
> 91
        _cons |   1.822981   1.169737     1.56   0.119    -.4696618    4.1156
> 23
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.WHPel |   1108.965   82.31511                      958.8171    1282.6
> 26
   e.whpsociso |    267.503   19.85593                      231.2845    309.39
> 32
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =      8.45, Prob > chi2 = 0.0037
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  WHPpa whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3634.2125
Iteration 1:   log likelihood = -3634.2125

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -3634.2125

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  WHPpa <-   |
       crhtw1 |   4.525226   1.168772     3.87   0.000     2.234476    6.8159
> 77
        _cons |   17.91426   1.113527    16.09   0.000     15.73179    20.096
> 73
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
        WHPpa |   .4249085   .0402602    10.55   0.000     .3459999     .5038
> 17
        _cons |   2.441428   1.139574     2.14   0.032     .2079032    4.6749
> 53
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.WHPpa |   440.0999   32.71237                      380.4363    509.12
> 05
   e.whpsociso |   268.9266   19.98916                      232.4687    311.10
> 22
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =      2.57, Prob > chi2 = 0.1086
```

Endogenous variables

Observed: **WHPpa whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3606.6295**
Iteration 1: log likelihood = **-3606.6295**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3606.6295**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
WHPpa <-						
crhtw2	**6.912245**	**1.23926**	**5.58**	**0.000**	**4.48334**	**9.341**
_cons	**17.2777**	**1.098849**	**15.72**	**0.000**	**15.12399**	**19.43**
whpsociso <-						
WHPpa	**.4251797**	**.0401646**	**10.59**	**0.000**	**.3464585**	**.50390**
_cons	**2.429695**	**1.1353**	**2.14**	**0.032**	**.204547**	**4.6548**
Variance						
e.WHPpa	**421.8494**	**31.3126**			**364.7332**	**487.90**
e.whpsociso	**268.2021**	**19.90783**			**231.889**	**310.20**

LR test of model vs. saturated: chi2(**1**) = **5.23**, Prob > chi2 = **0.0222**

Endogenous variables

Observed: **WHPpa whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3614.5027**
Iteration 1: log likelihood = **-3614.5027**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3614.5027**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
WHPpa <-					
crhtw3	**6.833494**	**1.210316**	**5.65**	**0.000**	**4.461318** **9.2056**
_cons	**17.2896**	**1.096923**	**15.76**	**0.000**	**15.13967** **19.439**
whpsociso <-					
WHPpa	**.4251797**	**.0401646**	**10.59**	**0.000**	**.3464585** **.50390**
_cons	**2.429695**	**1.1353**	**2.14**	**0.032**	**.204547** **4.6548**
Variance					
e.WHPpa	**421.0302**	**31.25179**			**364.0249** **486.96**
e.whpsociso	**268.2021**	**19.90783**			**231.889** **310.20**

LR test of model vs. saturated: chi2(**1**) = **6.57**, Prob > chi2 = **0.0104**
(1 observations with missing values excluded;
specify option 'method(mlmv)' to use all observations)

```
Endogenous variables

Observed:  emplw25 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =  -2076.793
Iteration 1:   log likelihood =  -2076.793

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     =  -2076.793

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  emplw25 <- |
       crhtw1 |    .067086   .0144596     4.64   0.000     .0387458    .09542
> 62
        _cons |   .0684197   .0137761     4.97   0.000      .041419    .09542
> 03
-------------+----------------------------------------------------------------
> ----
  whpsociso <- |
     emplw25 |    20.3846   3.530566     5.77   0.000     13.46482    27.304
> 38
        _cons |   8.732545   .9819041     8.89   0.000     6.808048    10.657
> 04
-------------+----------------------------------------------------------------
> ----
Variance     |
     e.emplw25 |   .0673599   .0050068                      .0582281    .07792
> 39
   e.whpsociso |   322.0213   23.93565                      278.3654    372.52
> 37
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      4.22, Prob > chi2 = 0.0400
```

Endogenous variables

Observed: **emplw25 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-2052.7216**
Iteration 1: log likelihood = **-2052.7216**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-2052.7216**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
emplw25 <-						
crhtw2	**.0710325**	**.0156606**	**4.54**	**0.000**	**.0403383**	**.10172**
_cons	**.0649287**	**.0138862**	**4.68**	**0.000**	**.0377122**	**.09214**
whpsociso <-						
emplw25	**20.41066**	**3.526442**	**5.79**	**0.000**	**13.49897**	**27.322**
_cons	**8.706478**	**.9794053**	**8.89**	**0.000**	**6.786879**	**10.626**
Variance						
e.emplw25	**.0673671**	**.0050005**			**.058246**	**.07791**
e.whpsociso	**321.3436**	**23.85236**			**277.8354**	**371.66**

LR test of model vs. saturated: chi2(**1**) = **12.23**, Prob > chi2 = **0.0005**

```
Endogenous variables

Observed:  emplw25 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2062.0248
Iteration 1:   log likelihood = -2062.0248

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2062.0248

------------------------------------------------------------------------------
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> --
Structural   |
  emplw25 <- |
       crhtw3 |    .065693   .0153552     4.28   0.000     .0355974    .09578
> 86
        _cons |   .0658305   .0139166     4.73   0.000     .0385545    .09310
> 65
-------------+----------------------------------------------------------------
> --
  whpsociso <- |
     emplw25 |   20.41066   3.526442     5.79   0.000     13.49897    27.322
> 36
        _cons |   8.706478   .9794053     8.89   0.000     6.786879    10.626
> 08
-------------+----------------------------------------------------------------
> --
Variance     |
     e.emplw25 |   .0677682   .0050302                      .0585927    .07838
> 05
   e.whpsociso |   321.3436   23.85236                      277.8354    371.66
> 51
------------------------------------------------------------------------------

> --
LR test of model vs. saturated: chi2(1)   =     14.80, Prob > chi2 = 0.0001
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

Endogenous variables

Observed: **emplw33 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1513.8832**
Iteration 1: log likelihood = **-1513.8832**

Structural equation model Number of obs = **362**
Estimation method = **ml**
Log likelihood = **-1513.8832**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
emplw33 <-						
crhtw1	.0013025	.0029233	0.45	0.656	-.0044271	.00703
_cons	.0025891	.0027852	0.93	0.353	-.0028697	.00804
whpsociso <-						
emplw33	-10.33781	18.77112	-0.55	0.582	-47.12852	26.45
_cons	10.33781	.986588	10.48	0.000	8.404135	12.271
Variance						
e.emplw33	.0027533	.0002047			.00238	.00318
e.whpsociso	351.3814	26.11798			303.7453	406.48

LR test of model vs. saturated: chi2(**1**) = **10.57**, Prob > chi2 = **0.0011**

Endogenous variables

Observed: **emplw33 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1487.7885**
Iteration 1: log likelihood = **-1487.7885**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1487.7885**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
emplw33 <-						
crhtw2	**-.0012861**	**.0031618**	**-0.41**	**0.684**	**-.0074831**	**.00491**
_cons	**.0029758**	**.0028035**	**1.06**	**0.288**	**-.002519**	**.00847**
whpsociso <-						
emplw33	**-10.30925**	**18.75302**	**-0.55**	**0.582**	**-47.0645**	**26.445**
_cons	**10.30925**	**.9842784**	**10.47**	**0.000**	**8.380104**	**12.23**
Variance						
e.emplw33	**.002746**	**.0002038**			**.0023742**	**.0031**
e.whpsociso	**350.707**	**26.03192**			**303.2232**	**405.62**

LR test of model vs. saturated: chi2(**1**) = **20.86**, Prob > chi2 = **0.0000**

```
Endogenous variables

Observed:  emplw33 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1496.0139
Iteration 1:   log likelihood = -1496.0139

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1496.0139

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  emplw33 <- |
       crhtw3 |  -.0012619   .0030909    -0.41   0.683      -.00732    .00479
> 63
        _cons |    .002972   .0028014     1.06   0.289    -.0025186    .00846
> 25
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
     emplw33 |  -10.30925   18.75302    -0.55   0.582     -47.0645    26.445
> 99
        _cons |   10.30925   .9842784    10.47   0.000     8.380104     12.23
> 84
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.emplw33 |    .002746   .0002038                     .0023742     .0031
> 76
   e.whpsociso |    350.707   26.03192                     303.2232    405.62
> 68
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     23.39, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  deaw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =  -2489.046
Iteration 1:   log likelihood =  -2489.046

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     =  -2489.046

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  deaw2 <-   |
       crhtw1|   .0785318   .0432369     1.82   0.069     -.006211    .16327
> 46
        _cons|   .4066754   .0411932     9.87   0.000     .3259382    .48741
> 26
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
       deaw2|  -.8085737   1.263574    -0.64   0.522    -3.285134    1.6679
> 87
        _cons|   10.64653   1.117223     9.53   0.000     8.456816    12.836
> 25
------------------------------------------------------------------------------
> ──
Variance     |
      e.deaw2|   .6022842   .0447674                      .5206336    .69674
> 01
   e.whpsociso|   351.2785   26.11032                      303.6563    406.36
> 93
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     10.99, Prob > chi2 = 0.0009
```

```
Endogenous variables

Observed:  deaw2 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2463.9892
Iteration 1:   log likelihood = -2463.9892

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2463.9892

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  deaw2 <-   |
       crhtw2 |   .1226175   .0465495     2.63   0.008     .0313822    .21385
> 29
        _cons |   .3949072   .0412753     9.57   0.000      .314009    .47580
> 54
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       deaw2 |  -.7884602   1.261895    -0.62   0.532    -3.26173    1.6848
> 09
        _cons |   10.60884     1.1142     9.52   0.000    8.425044    12.792
> 63
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.deaw2 |   .5951996   .0441799                     .5146127    .68840
> 61
   e.whpsociso |   350.6219    26.0256                     303.1496    405.52
> 83
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     22.22, Prob > chi2 = 0.0000
```

```
Endogenous variables

Observed:  deaw2 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2472.8425
Iteration 1:   log likelihood = -2472.8425

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2472.8425

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  deaw2 <-   |
       crhtw3 |   .1084722   .0455852     2.38   0.017     .0191269    .19781
> 76
        _cons |    .397312   .0413144     9.62   0.000     .3163373    .47828
> 67
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
       deaw2 |  -.7884602   1.261895    -0.62   0.532     -3.26173    1.6848
> 09
        _cons |   10.60884     1.1142     9.52   0.000     8.425044    12.792
> 63
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.deaw2 |   .5972603   .0443328                     .5163944    .69078
> 95
   e.whpsociso |   350.6219    26.0256                     303.1496    405.52
> 83
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     24.69, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  shhlw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3905.2575
Iteration 1:   log likelihood = -3905.2575

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -3905.2575

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  shhlw2 <-  |
       crhtw1 |    .833703   2.182466     0.38   0.702    -3.443852    5.1112
> 58
        _cons |     50.657   2.079306    24.36   0.000     46.58163    54.732
> 36
  ───────────┼────────────────────────────────────────────────────────────────
> ──
  whpsociso <-|
       shhlw2 |   .0669977    .024908     2.69   0.007     .0181789    .11581
> 64
        _cons |    6.90792   1.597334     4.32   0.000     3.777203    10.038
> 64
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.shhlw2 |   1534.571   114.0637                      1326.532    1775.2
> 36
   e.whpsociso |   344.7849   25.62766                       298.043    398.85
> 73
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     10.33, Prob > chi2 = 0.0013
```

Endogenous variables

Observed: **shhlw2 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-3883.2758**
Iteration 1: log likelihood = **-3883.2758**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3883.2758**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
shhlw2 <-						
crhtw2	**6.053722**	**2.344859**	**2.58**	**0.010**	**1.457883**	**10.649**
_cons	**49.58782**	**2.079182**	**23.85**	**0.000**	**45.5127**	**53.662**
whpsociso <-						
shhlw2	**.0676241**	**.0248211**	**2.72**	**0.006**	**.0189757**	**.11627**
_cons	**6.857176**	**1.589564**	**4.31**	**0.000**	**3.741687**	**9.9726**
Variance						
e.shhlw2	**1510.309**	**112.1057**			**1305.822**	**1746.**
e.whpsociso	**343.9655**	**25.53152**			**297.3944**	**397.82**

LR test of model vs. saturated: chi2(**1**) = **18.34**, Prob > chi2 = **0.0000**

Endogenous variables

Observed: **shhlw2 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3891.7245**
Iteration 1: log likelihood = **-3891.7245**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3891.7245**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
shhlw2 <-					
crhtw3	**5.71683**	**2.293726**	**2.49**	**0.013**	**1.22121** **10.212**
_cons	**49.64434**	**2.07883**	**23.88**	**0.000**	**45.56991** **53.718**
whpsociso <-					
shhlw2	**.0676241**	**.0248211**	**2.72**	**0.006**	**.0189757** **.11627**
_cons	**6.857176**	**1.589564**	**4.31**	**0.000**	**3.741687** **9.9726**
Variance					
e.shhlw2	**1512.163**	**112.2433**			**1307.425** **1748.9**
e.whpsociso	**343.9655**	**25.53152**			**297.3944** **397.82**

LR test of model vs. saturated: chi2(**1**) = **20.85,** Prob > chi2 = **0.0000**
(1 observations with missing values excluded;
specify option 'method(mlmv)' to use all observations)

```
Endogenous variables

Observed:  shfincw2 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3864.6747
Iteration 1:   log likelihood = -3864.6747

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -3864.6747

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  shfincw2 <-|
       crhtw1|  -1.611879   1.932409    -0.83   0.404    -5.399331    2.1755
> 72
        _cons|   32.52392   1.841068    17.67   0.000     28.91549    36.132
> 34
-------------+----------------------------------------------------------------
> ----
  whpsociso <-|
    shfincw2|  -.0135245   .0283804    -0.48   0.634    -.0691492    .04210
> 01
        _cons|   10.74622   1.345985     7.98   0.000     8.108141    13.384
> 31
------------------------------------------------------------------------------
> ----
Variance     |
    e.shfincw2|   1203.067   89.42327                      1039.969    1391.7
> 43
   e.whpsociso|   351.4554   26.12347                      303.8092    406.57
> 39
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =     10.36, Prob > chi2 = 0.0013
```

```
Endogenous variables

Observed:  shfincw2 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3842.5189
Iteration 1:   log likelihood = -3842.5189

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3842.5189

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  shfincw2 <-|
       crhtw2|   5.38016   2.075297     2.59   0.010     1.312652    9.4476
> 68
       _cons |   31.29585   1.840162    17.01   0.000      27.6892     34.90
> 25
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     shfincw2|  -.0127329   .0283203    -0.45   0.653    -.0682398    .04277
> 39
       _cons |   10.69111   1.341284     7.97   0.000     8.062245    13.319
> 98
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.shfincw2|   1183.023    87.8122                     1022.848    1368.2
> 81
   e.whpsociso|   350.8037   26.03909                     303.3067    405.73
> 85
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     21.95, Prob > chi2 = 0.0000
```

```
Endogenous variables

Observed:  shfincw2 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3848.8019
Iteration 1:   log likelihood = -3848.8019

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3848.8019

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  shfincw2 <-|
       crhtw3|   6.600941   2.017968     3.27   0.001     2.645797    10.556
> 08
       _cons |   31.08449   1.828907    17.00   0.000      27.4999    34.669
> 08
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     shfincw2|  -.0127329   .0283203    -0.45   0.653    -.0682398     .04277
> 39
       _cons |   10.69111   1.341284     7.97   0.000     8.062245    13.319
> 98
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.shfincw2|   1170.426    86.8772                      1011.957    1353.7
> 12
   e.whpsociso|   350.8037   26.03909                      303.3067    405.73
> 85
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     25.01, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  suprtw3 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3932.7021
Iteration 1:   log likelihood = -3932.7021

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -3932.7021

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  suprtw3 <- |
       crhtw1 |  -7.08681   2.389083    -2.97   0.003    -11.76933   -2.4042
> 94
        _cons |   56.3382   2.276156    24.75   0.000     51.87702    60.799
> 39
-------------+----------------------------------------------------------------
> ----
  whpsociso <- |
     suprtw3 |  -.0945543     .02216    -4.27   0.000     -.137987   -.05112
> 15
        _cons |   15.54709   1.559438     9.97   0.000     12.49065    18.603
> 53
-------------+----------------------------------------------------------------
> ----
Variance     |
     e.suprtw3 |   1838.884   136.6832                      1589.59    2127.2
> 75
   e.whpsociso |   334.8357   24.88814                      289.4426    387.34
> 77
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      7.18, Prob > chi2 = 0.0074
```

```
Endogenous variables

Observed:  suprtw3 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3916.7329
Iteration 1:   log likelihood = -3916.7329

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -3916.7329

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  suprtw3 <- |
      crhtw2 |  -3.557287   2.608413    -1.36   0.173    -8.669683     1.555
> 11
       _cons |   55.99146   2.312875    24.21   0.000      51.4583     60.524
> 61
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
     suprtw3 |  -.0944689   .0221396    -4.27   0.000    -.1378618    -.0510
> 76
       _cons |   15.51256   1.556942     9.96   0.000     12.46101    18.564
> 11
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.suprtw3 |   1868.897   138.7225                      1615.858    2161.5
> 61
   e.whpsociso |   334.2348   24.80924                      288.9812     386.5
> 75
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     19.24, Prob > chi2 = 0.0000
```

Endogenous variables

Observed: **suprtw3 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-3925.1467**
Iteration 1: log likelihood = **-3925.1467**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-3925.1467**

	OIM				
	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
suprtw3 <-					
crhtw3	**-3.106367**	**2.551288**	**-1.22**	**0.223**	**-8.106801** **1.8940**
_cons	**55.91471**	**2.312261**	**24.18**	**0.000**	**51.38276** **60.446**
whpsociso <-					
suprtw3	**-.0944689**	**.0221396**	**-4.27**	**0.000**	**-.1378618** **-.0510**
_cons	**15.51256**	**1.556942**	**9.96**	**0.000**	**12.46101** **18.564**
Variance					
e.suprtw3	**1870.832**	**138.8662**			**1617.531** **2163.7**
e.whpsociso	**334.2348**	**24.80924**			**288.9812** **386.5**

LR test of model vs. saturated: chi2(**1**) = **22.03,** Prob > chi2 = **0.0000**
(3 observations with missing values excluded;
specify option 'method(mlmv)' to use all observations)

```
Endogenous variables

Observed:  medcow3 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -3154.2197
Iteration 1:   log likelihood = -3154.2197

Structural equation model                       Number of obs      =       360
Estimation method  = ml
Log likelihood     = -3154.2197

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  medcow3 <- |
       crhtw1 |   .2595489   .2870289     0.90   0.366    -.3030173    .82211
> 51
        _cons |   3.942064   .2729182    14.44   0.000     3.407154    4.4769
> 74
-------------+----------------------------------------------------------------
> ----
  whpsociso <- |
     medcow3 |   .1408268   .1918866     0.73   0.463    -.2352641    .51691
> 77
        _cons |   9.628547   1.246484     7.72   0.000     7.185484    12.071
> 61
-------------+----------------------------------------------------------------
> ----
Variance     |
     e.medcow3 |   26.33678   1.963027                      22.75715    30.479
> 47
   e.whpsociso |   349.8968   26.07976                      302.3396    404.93
> 45
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      9.46, Prob > chi2 = 0.0021
(2 observations with missing values excluded;
```

```
 specify option 'method(mlmv)' to use all observations)

Endogenous variables

Observed:  medcow3 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -3132.9857
Iteration 1:   log likelihood = -3132.9857

Structural equation model                       Number of obs      =       361
Estimation method  = ml
Log likelihood     = -3132.9857

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  medcow3 <- |
       crhtw2 |   .2388806   .3105224     0.77   0.442    -.3697321    .84749
> 32
        _cons |   3.932604   .2747157    14.32   0.000     3.394171    4.4710
> 37
-------------+----------------------------------------------------------------
> ----
  whpsociso <- |
     medcow3 |   .1418551   .1916877     0.74   0.459     -.233846    .51755
> 61
        _cons |    9.59662   1.243834     7.72   0.000      7.15875    12.034
> 49
-------------+----------------------------------------------------------------
> ----
Variance     |
     e.medcow3 |   26.28302   1.956305                      22.71529     30.41
> 11
   e.whpsociso |   349.2065   25.99224                      301.8043    404.05
> 39
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =     19.61, Prob > chi2 = 0.0000
```

```
(2 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)

Endogenous variables

Observed:  medcow3 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -3140.5923
Iteration 1:   log likelihood = -3140.5923

Structural equation model                       Number of obs      =       361
Estimation method  = ml
Log likelihood     = -3140.5923

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  medcow3 <- |
       crhtw3 |   .4335941   .3028265     1.43   0.152    -.1599349    1.0271
> 23
        _cons |   3.900059   .2739693    14.24   0.000     3.363089    4.4370
> 29
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
     medcow3 |   .1418551   .1916877     0.74   0.459     -.233846    .51755
> 61
        _cons |    9.59662   1.243834     7.72   0.000      7.15875    12.034
> 49
-------------+----------------------------------------------------------------
> ──
Variance     |
     e.medcow3 |   26.17744   1.948447                      22.62405    30.288
> 94
   e.whpsociso |   349.2065   25.99224                      301.8043    404.05
> 39
-------------+----------------------------------------------------------------
> ──
```

```
LR test of model vs. saturated: chi2(1)   =     21.97, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)

Endogenous variables

Observed:  illw3 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -2609.0188
Iteration 1:   log likelihood = -2609.0188

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -2609.0188

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  illw3 <-   |
       crhtw1 |  -.3790981   .0616884    -6.15   0.000     -.500005   -.25819
> 11
        _cons |   .7631609   .0587725    12.99   0.000     .6479689    .87835
> 29
-------------+----------------------------------------------------------------
> ──
  whpsociso <- |
        illw3 |   3.527742   .8265286     4.27   0.000     1.907776    5.1477
> 08
        _cons |   7.795007   1.127804     6.91   0.000     5.584552    10.005
> 46
-------------+----------------------------------------------------------------
> ──
Variance     |
      e.illw3 |   1.226022   .0911295                     1.059813    1.4182
> 99
   e.whpsociso |   334.8263   24.88744                     289.4345    387.33
> 69
------------------------------------------------------------------------------
```

```
> ——
LR test of model vs. saturated: chi2(1)   =     24.21, Prob > chi2 = 0.0000

Endogenous variables

Observed:  illw3 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -2602.9497
Iteration 1:   log likelihood = -2602.9497

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2602.9497

——————————————┼———————————————————————————————————————————————————————————
> ——
              │                 OIM
              │      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
——————————————┼———————————————————————————————————————————————————————————
> ——
Structural    │
  illw3 <-    │
        crhtw2 │   .1047588   .0699308     1.50   0.134     -.032303     .24182
> 06
         _cons │   .6927419   .0620075    11.17   0.000     .5712095     .81427
> 43
  ————————————┼———————————————————————————————————————————————————————————
> ——
  whpsociso <- │
         illw3 │   3.539034   .8251691     4.29   0.000     1.921733     5.1563
> 36
         _cons │   7.765507   1.124397     6.91   0.000      5.56173     9.9692
> 85
——————————————┼———————————————————————————————————————————————————————————
> ——
Variance      │
       e.illw3 │   1.343288   .0997082                      1.161414     1.5536
> 43
    e.whpsociso │   334.0706   24.79705                      288.8393     386.38
> 51
——————————————┼———————————————————————————————————————————————————————————
> ——
```

```
LR test of model vs. saturated: chi2(1)   =     18.99, Prob > chi2 = 0.0000

Endogenous variables

Observed:  illw3 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -2605.6012
Iteration 1:   log likelihood = -2605.6012

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -2605.6012

------------------------------------------------------------------------------
> ──
                 |                 OIM
                 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-----------------+------------------------------------------------------------
> ──
Structural       |
  illw3 <-       |
         crhtw3  |   .2486013    .067322     3.69   0.000     .1166525     .38055
> 01
          _cons  |   .6679643   .0610147    10.95   0.000     .5483776      .7875
> 51
-----------------+------------------------------------------------------------
> ──
  whpsociso <-   |
          illw3  |   3.539034   .8251691     4.29   0.000     1.921733     5.1563
> 36
          _cons  |   7.765507   1.124397     6.91   0.000      5.56173     9.9692
> 85
-----------------+------------------------------------------------------------
> ──
Variance         |
        e.illw3  |   1.302658   .0966923                      1.126285      1.506
> 65
     e.whpsociso |   334.0706   24.79705                      288.8393     386.38
> 51
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     17.62, Prob > chi2 = 0.0000
```

```
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)

Endogenous variables

Observed:  icdx1nr12 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood =   -1859.41
Iteration 1:   log likelihood =   -1859.41

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     =   -1859.41

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx1nr12 <-
       crhtw1 |   .0075392   .0076618     0.98   0.325    -.0074776     .0225
> 56
        _cons |   .0183336   .0072996     2.51   0.012     .0040267     .03264
> 06
-------------+----------------------------------------------------------------
> ──
  whpsociso <-
    icdx1nr12 |   18.62227   7.090279     2.63   0.009     4.725581     32.518
> 97
        _cons |   9.949155   .9859573    10.09   0.000     8.016714      11.88
> 16
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx1nr12 |   .0189125   .0014058                      .0163486     .02187
> 85
   e.whpsociso |   345.0997   25.65106                      298.3151     399.22
> 14
------------------------------------------------------------------------------

> ──
```

```
LR test of model vs. saturated: chi2(1)   =      9.82, Prob > chi2 = 0.0017

Endogenous variables

Observed:  icdx1nr12 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -1834.7247
Iteration 1:   log likelihood = -1834.7247

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1834.7247

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx1nr12 <-
       crhtw2 |  -.0013362   .0082973    -0.16   0.872    -.0175985     .01492
> 62
        _cons |   .0195134   .0073572     2.65   0.008     .0050936     .03393
> 32
-------------+----------------------------------------------------------------
> ──
  whpsociso <-
     icdx1nr12 |   18.65022   7.083111     2.63   0.008     4.767578     32.532
> 86
        _cons |   9.921208   .9836028    10.09   0.000     7.993382     11.849
> 03
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx1nr12 |   .0189105   .0014037                      .0163501     .02187
> 19
   e.whpsociso |   344.4209   25.56532                      297.7881     398.35
> 62
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     21.57, Prob > chi2 = 0.0000
```

```
Endogenous variables

Observed:  icdx1nr12 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1842.9576
Iteration 1:   log likelihood = -1842.9576

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1842.9576

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx1nr12 <-
       crhtw3 |   .0008959   .0081115     0.11   0.912    -.0150023    .01679
> 42
        _cons |   .0191296   .0073516     2.60   0.009     .0047208    .03353
> 84
  ───────────┼────────────────────────────────────────────────────────────────
> ──
  whpsociso <-
     icdx1nr12 |   18.65022   7.083111     2.63   0.008     4.767578    32.532
> 86
        _cons |   9.921208   .9836028    10.09   0.000     7.993382    11.849
> 03
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx1nr12 |   .0189112   .0014037                      .0163508    .02187
> 27
   e.whpsociso |   344.4209   25.56532                      297.7881    398.35
> 62
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     23.79, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
```

```
 specify option 'method(mlmv)' to use all observations)

Endogenous variables

Observed:  icdx5nr4 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1509.6578
Iteration 1:   log likelihood = -1509.6578

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -1509.6578

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx5nr4 <-|
       crhtw1|  -.0038018   .0029173    -1.30   0.193    -.0095196      .0019
> 16
       _cons |   .0032684   .0027794     1.18   0.240    -.0021791      .0087
> 16
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     icdx5nr4|   50.33981   18.59166     2.71   0.007     13.90083     86.778
> 79
       _cons |   10.17019   .9771559    10.41   0.000     8.255004     12.085
> 38
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.icdx5nr4|   .0027419   .0002038                      .0023702      .0031
> 72
   e.whpsociso|   344.6949   25.62097                      297.9652     398.75
> 32
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     12.02, Prob > chi2 = 0.0005
```

```
Endogenous variables

Observed:  icdx5nr4 whpsociso

Exogenous variables

Observed:  crhtw2

Fitting target model:

Iteration 0:   log likelihood = -1483.7449
Iteration 1:   log likelihood = -1483.7449

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1483.7449

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  icdx5nr4 <-|
       crhtw2|   .0035669    .003157     1.13   0.259    -.0026206    .00975
> 44
        _cons|   .0021419   .0027993     0.77   0.444    -.0033446    .00762
> 83
-------------+----------------------------------------------------------------
> ----
  whpsociso <-|
    icdx5nr4|    50.3679   18.57363     2.71   0.007     13.96425    86.771
> 56
        _cons|    10.1421   .9748629    10.40   0.000     8.231403     12.05
> 28
-------------+----------------------------------------------------------------
> ----
Variance     |
    e.icdx5nr4|   .0027376   .0002032                      .0023669    .00316
> 63
   e.whpsociso|   344.0295   25.53626                      297.4497    397.90
> 35
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =     19.93, Prob > chi2 = 0.0000
```

```
Endogenous variables

Observed:  icdx5nr4 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1492.0396
Iteration 1:   log likelihood = -1492.0396

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1492.0396

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx5nr4 <-|
       crhtw3|    .003294   .0030868     1.07   0.286    -.0027561     .0093
> 44
       _cons |    .002188   .0027976     0.78   0.434    -.0032952    .00767
> 12
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     icdx5nr4|    50.3679   18.57363     2.71   0.007     13.96425    86.771
> 56
       _cons |    10.1421   .9748629    10.40   0.000     8.231403     12.05
> 28
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.icdx5nr4|   .0027386   .0002033                     .0023678    .00316
> 75
   e.whpsociso|   344.0295   25.53626                     297.4497    397.90
> 35
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     22.51, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

Endogenous variables

Observed: **icdx6nr3 whpsociso**

Exogenous variables

Observed: **crhtw1**

Fitting target model:

Iteration 0: log likelihood = **-1626.4554**
Iteration 1: log likelihood = **-1626.4554**

Structural equation model Number of obs = **362**
Estimation method = **ml**
Log likelihood = **-1626.4554**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx6nr3 <-						
crhtw1	**-.0077281**	**.0041096**	**-1.88**	**0.060**	**-.0157828**	**.00032**
_cons	**.0065534**	**.0039154**	**1.67**	**0.094**	**-.0011206**	**.01422**
whpsociso <-						
icdx6nr3	**61.09831**	**12.90359**	**4.73**	**0.000**	**35.80773**	**86.388**
_cons	**9.971695**	**.9591163**	**10.40**	**0.000**	**8.091861**	**11.851**
Variance						
e.icdx6nr3	**.0054412**	**.0004044**			**.0047035**	**.00629**
e.whpsociso	**331.1655**	**24.61534**			**286.2699**	**383.1**

LR test of model vs. saturated: chi2(**1**) = **14.70**, Prob > chi2 = **0.0001**

Endogenous variables

Observed: **icdx6nr3 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1602.3766**
Iteration 1: log likelihood = **-1602.3766**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1602.3766**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx6nr3 <-						
crhtw2	**.0012967**	**.0044658**	**0.29**	**0.772**	**-.007456**	**.01004**
_cons	**.0052868**	**.0039598**	**1.34**	**0.182**	**-.0024742**	**.01304**
whpsociso <-						
icdx6nr3	**61.12593**	**12.89103**	**4.74**	**0.000**	**35.85997**	**86.391**
_cons	**9.944072**	**.9568623**	**10.39**	**0.000**	**8.068657**	**11.819**
Variance						
e.icdx6nr3	**.005478**	**.0004066**			**.0047363**	**.00633**
e.whpsociso	**330.5263**	**24.53397**			**285.7748**	**382.28**

LR test of model vs. saturated: chi2(**1**) = **21.58**, Prob > chi2 = **0.0000**

```
Endogenous variables

Observed:  icdx6nr3 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1610.2125
Iteration 1:   log likelihood = -1610.2125

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1610.2125

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx6nr3 <-|
       crhtw3|   .0040573    .004361     0.93   0.352    -.0044901    .01260
> 47
       _cons |   .0048115   .0039524     1.22   0.223    -.0029352    .01255
> 81
-------------+----------------------------------------------------------------
> ──
  whpsociso <-|
     icdx6nr3|   61.12593   12.89103     4.74   0.000     35.85997    86.391
> 89
       _cons |   9.944072   .9568623    10.39   0.000     8.068657    11.819
> 49
-------------+----------------------------------------------------------------
> ──
Variance     |
    e.icdx6nr3|   .0054663   .0004057                      .0047262    .00632
> 23
   e.whpsociso|   330.5263   24.53397                      285.7748    382.28
> 58
------------------------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     22.67, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  icdx6nr11 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1636.4111
Iteration 1:   log likelihood = -1636.4111

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -1636.4111

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  icdx6nr11 <-
       crhtw1 |  -.0025967   .0041274    -0.63   0.529    -.0106862    .00549
> 28
        _cons |   .0058705   .0039323     1.49   0.135    -.0018367    .01357
> 76
-------------+----------------------------------------------------------------
> ----
  whpsociso <-
     icdx6nr11 |   29.52889   13.20629     2.24   0.025     3.645039    55.412
> 74
        _cons |   10.14611   .9816158    10.34   0.000      8.22218    12.070
> 04
-------------+----------------------------------------------------------------
> ----
Variance     |
   e.icdx6nr11 |   .0054883   .0004079                      .0047443    .00634
> 91
   e.whpsociso |    346.885   25.78376                      299.8584    401.28
> 68
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =     11.13, Prob > chi2 = 0.0008
```

Endogenous variables

Observed: **icdx6nr11 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1610.3643**
Iteration 1: log likelihood = **-1610.3643**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1610.3643**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx6nr11 <-						
crhtw2	-.0043266	.0044605	-0.97	0.332	-.0130691	.00441
_cons	.0062531	.0039551	1.58	0.114	-.0014987	.0140
whpsociso <-						
icdx6nr11	29.557	13.19338	2.24	0.025	3.698456	55.415
_cons	10.11801	.9793042	10.33	0.000	8.198605	12.037
Variance						
e.icdx6nr11	.0054651	.0004057			.0047252	.00632
e.whpsociso	346.2122	25.69828			299.3369	400.42

LR test of model vs. saturated: chi2(**1**) = **22.41**, Prob > chi2 = **0.0000**

```
Endogenous variables

Observed:  icdx6nr11 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1618.6129
Iteration 1:   log likelihood = -1618.6129

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1618.6129

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx6nr11 <-
       crhtw3 |  -.0041268   .0043608    -0.95   0.344    -.0126739    .00442
> 02
        _cons |   .0062198   .0039523     1.57   0.116    -.0015265    .01396
> 61
  -----------+----------------------------------------------------------------
> ──
  whpsociso <-
     icdx6nr11 |     29.557   13.19338     2.24   0.025     3.698456    55.415
> 54
        _cons |   10.11801   .9793042    10.33   0.000     8.198605    12.037
> 41
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx6nr11 |   .0054658   .0004057                      .0047258    .00632
> 17
   e.whpsociso |   346.2122   25.69828                      299.3369    400.42
> 81
-------------+----------------------------------------------------------------

> ──
LR test of model vs. saturated: chi2(1)   =     25.03, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  icdx6nr12 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1501.5845
Iteration 1:   log likelihood = -1501.5845

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -1501.5845

------------------------------------------------------------------------------
> ----
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ----
Structural   |
  icdx6nr12 <-
       crhtw1 |   .0034592   .0029185     1.19   0.236    -.0022609    .00917
> 94
        _cons |    .002302   .0027805     0.83   0.408    -.0031477    .00775
> 18
-------------+----------------------------------------------------------------
> ----
  whpsociso <-
     icdx6nr12 |    89.9392   18.17428     4.95   0.000     54.31826    125.56
> 01
        _cons |    10.0608   .9552191    10.53   0.000     8.188608      11.9
> 33
-------------+----------------------------------------------------------------
> ----
Variance     |
   e.icdx6nr12 |   .0027442    .000204                      .0023721    .00317
> 45
   e.whpsociso |   329.3921   24.48352                      284.737    381.05
> 05
------------------------------------------------------------------------------
> ----
LR test of model vs. saturated: chi2(1)   =      9.22, Prob > chi2 = 0.0024
```

Endogenous variables

Observed: **icdx6nr12 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1475.4483**
Iteration 1: log likelihood = **-1475.4483**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1475.4483**

	OIM					
	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
icdx6nr12 <-						
crhtw2	.0037258	.0031565	1.18	0.238	-.0024608	.00991
_cons	.0021146	.0027988	0.76	0.450	-.003371	.00760
whpsociso <-						
icdx6nr12	89.96699	18.15684	4.95	0.000	54.38023	125.55
_cons	10.03301	.9529871	10.53	0.000	8.165191	11.900
Variance						
e.icdx6nr12	.0027367	.0002031			.0023662	.00316
e.whpsociso	328.7628	24.40306			284.25	380.24

LR test of model vs. saturated: chi2(**1**) = **19.55**, Prob > chi2 = **0.0000**

```
Endogenous variables

Observed:  icdx6nr12 whpsociso

Exogenous variables

Observed:  crhtw3

Fitting target model:

Iteration 0:   log likelihood = -1483.7505
Iteration 1:   log likelihood = -1483.7505

Structural equation model                       Number of obs      =       363
Estimation method  = ml
Log likelihood     = -1483.7505

------------------------------------------------------------------------------
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> --
Structural   |
  icdx6nr12 <-
       crhtw3 |   .0034374   .0030864     1.11   0.265    -.0026118    .00948
> 66
        _cons |   .0021633   .0027972     0.77   0.439    -.0033191    .00764
> 58
-------------+----------------------------------------------------------------
> --
  whpsociso <-
     icdx6nr12 |   89.96699   18.15684     4.95   0.000     54.38023    125.55
> 37
        _cons |   10.03301   .9529871    10.53   0.000     8.165191    11.900
> 83
-------------+----------------------------------------------------------------
> --
Variance     |
   e.icdx6nr12 |   .0027379   .0002032                      .0023672    .00316
> 66
   e.whpsociso |   328.7628   24.40306                        284.25    380.24
> 61
------------------------------------------------------------------------------

> --
LR test of model vs. saturated: chi2(1)   =     22.25, Prob > chi2 = 0.0000
(1 observations with missing values excluded;
 specify option 'method(mlmv)' to use all observations)
```

```
Endogenous variables

Observed:  icdx7nr26 whpsociso

Exogenous variables

Observed:  crhtw1

Fitting target model:

Iteration 0:   log likelihood = -1509.7057
Iteration 1:   log likelihood = -1509.7057

Structural equation model                       Number of obs      =       362
Estimation method  = ml
Log likelihood     = -1509.7057

------------------------------------------------------------------------------
> ──
             |                 OIM
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interva
> l]
-------------+----------------------------------------------------------------
> ──
Structural   |
  icdx7nr26 <-
       crhtw1 |  -.0033391   .0029189    -1.14   0.253      -.00906    .00238
> 18
        _cons |   .0032068   .0027809     1.15   0.249    -.0022437    .00865
> 73
  -----------+----------------------------------------------------------------
> ──
  whpsociso <-
     icdx7nr26 |   51.33255   18.58416     2.76   0.006     14.90827    87.756
> 83
        _cons |   10.16745   .9767617    10.41   0.000     8.253034    12.081
> 87
-------------+----------------------------------------------------------------
> ──
Variance     |
   e.icdx7nr26 |   .0027449    .000204                      .0023728    .00317
> 54
   e.whpsociso |   344.4169    25.6003                      297.7249    398.43
> 16
------------------------------------------------------------------------------
> ──
LR test of model vs. saturated: chi2(1)   =     11.88, Prob > chi2 = 0.0006
```

Endogenous variables

Observed: **icdx7nr26 whpsociso**

Exogenous variables

Observed: **crhtw2**

Fitting target model:

Iteration 0: log likelihood = **-1483.5404**
Iteration 1: log likelihood = **-1483.5404**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1483.5404**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
icdx7nr26 <-					
crhtw2	**.0037258**	**.0031565**	**1.18**	**0.238**	**-.0024608** **.00991**
_cons	**.0021146**	**.0027988**	**0.76**	**0.450**	**-.003371** **.00760**
whpsociso <-					
icdx7nr26	**51.36064**	**18.56614**	**2.77**	**0.006**	**14.97166** **87.749**
_cons	**10.13936**	**.9744698**	**10.41**	**0.000**	**8.229439** **12.049**
Variance					
e.icdx7nr26	**.0027367**	**.0002031**			**.0023662** **.00316**
e.whpsociso	**343.7521**	**25.51567**			**297.2099** **397.58**

LR test of model vs. saturated: chi2(**1**) = **19.86**, Prob > chi2 = **0.0000**

Endogenous variables

Observed: **icdx7nr26 whpsociso**

Exogenous variables

Observed: **crhtw3**

Fitting target model:

Iteration 0: log likelihood = **-1491.8425**
Iteration 1: log likelihood = **-1491.8425**

Structural equation model Number of obs = **363**
Estimation method = **ml**
Log likelihood = **-1491.8425**

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Structural					
icdx7nr26 <-					
crhtw3	**.0034374**	**.0030864**	**1.11**	**0.265**	**-.0026118**	**.00948**
_cons	**.0021633**	**.0027972**	**0.77**	**0.439**	**-.0033191**	**.00764**
whpsociso <-					
icdx7nr26	**51.36064**	**18.56614**	**2.77**	**0.006**	**14.97166**	**87.749**
_cons	**10.13936**	**.9744698**	**10.41**	**0.000**	**8.229439**	**12.049**
Variance					
e.icdx7nr26	**.0027379**	**.0002032**			**.0023672**	**.00316**
e.whpsociso	**343.7521**	**25.51567**			**297.2099**	**397.58**

LR test of model vs. saturated: chi2(**1**) = **22.44**, Prob > chi2 = **0.0000**

```
123 .
124 . * Possible female social isolation indirect effects-------------------------
    > ---
125 . *-+- Possible indirect effects through
126 . * wave 1 age illw3 suprtw3 emplw25 whpPA whpEL
127 . * wave 2 age illw3 shhlw2 emplw25 whpPA whpEL BSIphanx BSIdep
128 . * wave 3 age illw3 shhlw2 emplw25 whpPA whpEL BSIphanx BSIdep
129 . ************************************************************************
    > ****
130 . *------ Male PA chunk ------------------------------------------------------
    > ----
131 .
```