Chapter 8 Stata v10.1 Analysis Examples Syntax and Output

General Notes on Stata 10.1

Given that this tool is used throughout the ASDA textbook this chapter includes only the syntax and output for the analysis examples provided in Chapter 8. Stata 10.1 is an excellent tool for survey data analysis as well as graphing and related data management tasks. It offers a very comprehensive set of svy commands as well as weighted graphics and convenient syntax and data management abilities. For these reasons, we use Stata as the primary software for the ASDA text.

The examples and syntax presented here assume that all data management including variable construction, labels for variable values and other preparation steps are complete. See the Stata documentation for assistance with these issues.

All analysis examples presented can be done in Stata 10.1 and are included in this chapter's output.

Please check the Stata documentation and also the ASDA web site for updates to Stata as new versions are released. For example, we have already included an example of how to use Stata 11.0 with the new "factor" variable features/syntax and compared this to the older "xi" type of syntax for including categorical variables in data analysis.

CHAPTER 8 ANALYSIS EXAMPLES REPLICATION STATA 10

*example 8.1 Bivariate analyses for predicting MDE NCS-R DATA

```
svy: tab  ag4cat mde, row se
(running tabulate on estimation sample)

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42

------------------------------------
           |      MajorDepEpisode
   ag4cat |       0        1    Total
----------+-------------------------
     <=29 |    .816     .184        1
          | (.0089)  (.0089)
          |
    30-44 |   .7712    .2288        1
          |  (.011)   (.011)
          |
    45-59 |   .7767    .2233        1
          | (.0126)  (.0126)
          |
     >=60 |   .8894    .1106        1
          | (.0096)  (.0096)
          |
    Total |   .8082    .1918        1
          | (.0064)  (.0064)
------------------------------------
  Key:  row proportions
        (linearized standard errors of row proportions)

  Pearson:
    Uncorrected   chi2(3)         =   75.9697
    Design-based  F(2.76, 115.97) =   26.3902     P = 0.0000

. svy: tab  sex mde, row se
(running tabulate on estimation sample)

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42

------------------------------------
           |      MajorDepEpisode
       sex |       0        1    Total
----------+-------------------------
      Male |   .8471    .1529        1
           | (.0091)  (.0091)
           |
    Female |   .7738    .2262        1
           | (.0067)  (.0067)
           |
    Total |   .8082    .1918        1
          | (.0064)  (.0064)
------------------------------------
  Key:  row proportions
        (linearized standard errors of row proportions)

  Pearson:
    Uncorrected   chi2(1)         =   49.1166
    Design-based  F(1, 42)        =   44.8339     P = 0.0000
```

```
. svy: tab  ald mde, row se
(running tabulate on estimation sample)

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42

------------------------------------
          |      MajorDepEpisode
   AlcDep |       0        1    Total
----------+-------------------------
        0 |   .8231    .1769        1
          | (.0065)  (.0065)
          |
        1 |   .5484    .4516        1
          |  (.029)   (.029)
          |
    Total |   .8082    .1918        1
          | (.0064)  (.0064)
------------------------------------
  Key:  row proportions
        (linearized standard errors of row proportions)

  Pearson:
    Uncorrected   chi2(1)         =  141.7044
    Design-based  F(1, 42)        =  120.0282     P = 0.0000

. svy: tab ed4cat mde, row se
(running tabulate on estimation sample)

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42

------------------------------------
years of  |
education |
-4        |
categorie |      MajorDepEpisode
s         |       0        1    Total
----------+-------------------------
     0-11 |   .8369    .1631        1
          | (.0121)  (.0121)
          |
       12 |   .8145    .1855        1
          | (.0083)  (.0083)
          |
    13-15 |   .7875    .2125        1
          | (.0104)  (.0104)
          |
      16+ |   .8033    .1967        1
          | (.0109)  (.0109)
          |
    Total |   .8082    .1918        1
          | (.0064)  (.0064)
------------------------------------
  Key:  row proportions
        (linearized standard errors of row proportions)

  Pearson:
    Uncorrected   chi2(3)         =   10.0806
    Design-based  F(2.90, 121.93) =    4.3043     P = 0.0069
```

```
. svy: tab mar3cat mde, row se
(running tabulate on estimation sample)

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42

-------------------------------------
marital   |
status-3  |
categorie |      MajorDepEpisode
s         |       0        1    Total
----------+--------------------------
  married |   .8267    .1733        1
          | (.0074)  (.0074)
          |
 sep/wid/ |    .761     .239        1
          | (.0145)  (.0145)
          |
 never ma |    .806     .194        1
          | (.0115)  (.0115)
          |
    Total |   .8082    .1918        1
          | (.0064)  (.0064)
-------------------------------------
  Key:  row proportions
        (linearized standard errors of row proportions)

  Pearson:
    Uncorrected   chi2(2)         =   24.1420
    Design-based  F(1.90, 79.74)  =   11.0849     P = 0.0001
```

```
*stage 2 model estimation

. char sex[omit] 2

. svyset seclustr [pweight=ncsrwtlg], strata(sestrat) vce(linearized) singleunit(missing)

      pweight: ncsrwtlg
          VCE: linearized
  Single unit: missing
     Strata 1: sestrat
         SU 1: seclustr
        FPC 1: <zero>

. xi: svy: logistic mde i.ag4cat i.sex ald i.ed4cat i.mar3cat
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running logistic on estimation sample)

Survey: Logistic regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(  10,     33)    =     28.07
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         mde | Odds Ratio   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |    1.29126   .1218742     2.71   0.010     1.067313    1.562197
  _Iag4cat_3 |   1.229302    .112517     2.26   0.029     1.021971    1.478695
  _Iag4cat_4 |   .5087563   .0718888    -4.78   0.000     .3825303    .6766338
     _Isex_1 |   .5613867   .0433476    -7.48   0.000     .4803828    .6560499
         ald |   4.152358   .6401312     9.24   0.000     3.042157    5.667712
  _Ied4cat_2 |    1.08248   .1048871     0.82   0.418     .8902193    1.316264
  _Ied4cat_3 |   1.259243   .1171994     2.48   0.017      1.04361    1.519432
  _Ied4cat_4 |   1.176949   .1301881     1.47   0.148     .9414778    1.471313
 _Imar3cat_2 |   1.626487   .1389338     5.69   0.000     1.368943    1.932484
 _Imar3cat_3 |   1.122524   .1210876     1.07   0.290     .9029277    1.395526
------------------------------------------------------------------------------


. test _Iag4cat_2 _Iag4cat_3 _Iag4cat_4

Adjusted Wald test

 ( 1)  _Iag4cat_2 = 0
 ( 2)  _Iag4cat_3 = 0
 ( 3)  _Iag4cat_4 = 0

       F(  3,    40) =   19.03
            Prob > F =    0.0000

. test _Ied4cat_2 _Ied4cat_3 _Ied4cat_4

Adjusted Wald test

 ( 1)  _Ied4cat_2 = 0
 ( 2)  _Ied4cat_3 = 0
 ( 3)  _Ied4cat_4 = 0

       F(  3,    40) =    2.13
            Prob > F =    0.1116

. test _Imar3cat_2 _Imar3cat_3

Adjusted Wald test

 ( 1)  _Imar3cat_2 = 0
 ( 2)  _Imar3cat_3 = 0

       F(  2,    41) =   16.60
            Prob > F =    0.0000
```

```
xi: svy: logistic mde i.ag4cat i.sex ald i.ed4cat i.mar3cat , coef
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running logistic on estimation sample)

Survey: Logistic regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(  10,     33)    =     28.07
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         mde |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .2556185   .0943839     2.71   0.010     .0651441    .4460929
  _Iag4cat_3 |   .2064465   .0915292     2.26   0.029     .0217332    .3911598
  _Iag4cat_4 |  -.6757863   .1413031    -4.78   0.000    -.9609475    -.390625
     _Isex_1 |  -.5773452   .0772153    -7.48   0.000     -.733172   -.4215184
         ald |   1.423676   .1541609     9.24   0.000     1.112567    1.734786
  _Ied4cat_2 |    .079255   .0968952     0.82   0.418    -.1162874    .2747974
  _Ied4cat_3 |   .2305111   .0930713     2.48   0.017     .0426856    .4183365
  _Ied4cat_4 |   .1629254   .1106149     1.47   0.148    -.0603045    .3861553
 _Imar3cat_2 |   .4864225   .0854196     5.69   0.000     .3140388    .6588062
 _Imar3cat_3 |   .1155794   .1078708     1.07   0.290    -.1021128    .3332716
       _cons |  -1.583077   .1206597   -13.12   0.000    -1.826578   -1.339575
------------------------------------------------------------------------------



. * test of goodness of fit using svylogitgof
. xi: svy: logistic mde i.ag4cat i.sex ald i.ed4cat i.mar3cat, coef
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running logistic on estimation sample)

Survey: Logistic regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(  10,     33)    =     28.07
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         mde |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .2556185   .0943839     2.71   0.010     .0651441    .4460929
  _Iag4cat_3 |   .2064465   .0915292     2.26   0.029     .0217332    .3911598
  _Iag4cat_4 |  -.6757863   .1413031    -4.78   0.000    -.9609475    -.390625
     _Isex_1 |  -.5773452   .0772153    -7.48   0.000     -.733172   -.4215184
         ald |   1.423676   .1541609     9.24   0.000     1.112567    1.734786
  _Ied4cat_2 |    .079255   .0968952     0.82   0.418    -.1162874    .2747974
  _Ied4cat_3 |   .2305111   .0930713     2.48   0.017     .0426856    .4183365
  _Ied4cat_4 |   .1629254   .1106149     1.47   0.148    -.0603045    .3861553
 _Imar3cat_2 |   .4864225   .0854196     5.69   0.000     .3140388    .6588062
 _Imar3cat_3 |   .1155794   .1078708     1.07   0.290    -.1021128    .3332716
       _cons |  -1.583077   .1206597   -13.12   0.000    -1.826578   -1.339575
------------------------------------------------------------------------------

. svylogitgof
F-adjusted test statistic = 1.2292479
p-value                   = .31029551
```

```
*interaction testing for sex*each other predictor group in model

. xi: svy: logistic mde i.ag4cat*i.sex i.sex*ald i.ed4cat*i.sex i.mar3cat*i.sex , coef
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ag4~t*i.sex     _Iag4Xsex_#_#       (coded as above)
i.sex*ald         _IsexXald_#         (coded as above)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.ed4~t*i.sex     _Ied4Xsex_#_#       (coded as above)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
i.mar~t*i.sex     _ImarXsex_#_#       (coded as above)
(running logistic on estimation sample)
note: _Isex_1 dropped because of collinearity
note: _Isex_1 dropped because of collinearity
note: _Isex_1 dropped because of collinearity

Survey: Logistic regression
Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(  19,     24)    =     17.15
                                                Prob > F           =    0.0000
------------------------------------------------------------------------------
             |             Linearized
         mde |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .2204041   .1137606     1.94   0.059    -.0091742    .4499823
  _Iag4cat_3 |    .214641   .1024942     2.09   0.042     .0077993    .4214827
  _Iag4cat_4 |  -.6455558   .1751924    -3.68   0.001    -.9991084   -.2920033
     _Isex_1 |  -.5464415   .3571641    -1.53   0.134    -1.267228    .1743449
_Iag4Xse~2_1 |   .0967431   .2008412     0.48   0.633    -.3085708     .502057
_Iag4Xse~3_1 |    .002637    .212819     0.01   0.990    -.4268491     .432123
_Iag4Xse~4_1 |  -.0378099   .3020415    -0.13   0.901    -.6473543    .5717345
         ald |    1.55314   .2110231     7.36   0.000     1.127278    1.979002
 _IsexXald_1 |  -.2004168   .2422447    -0.83   0.413    -.6892865    .2884528
  _Ied4cat_2 |   .1305184   .0837105     1.56   0.126    -.0384162     .299453
  _Ied4cat_3 |   .2973241   .1170419     2.54   0.015     .0611241    .5335242
  _Ied4cat_4 |   .2422184   .1518702     1.59   0.118    -.0642682    .5487049
_Ied4Xse~2_1 |  -.1377802   .2710163    -0.51   0.614    -.6847131    .4091528
_Ied4Xse~3_1 |  -.1687904   .2693435    -0.63   0.534    -.7123476    .3747667
_Ied4Xse~4_1 |  -.1940178   .3441702    -0.56   0.576    -.8885814    .5005457
 _Imar3cat_2 |   .4177856   .1105251     3.78   0.000      .194737    .6408342
 _Imar3cat_3 |    .017337   .1297818     0.13   0.894    -.2445733    .2792472
_ImarXse~2_1 |    .182504   .2078787     0.88   0.385    -.2370122    .6020202
_ImarXse~3_1 |   .2318977   .2119616     1.09   0.280    -.1958581    .6596536
       _cons |  -1.599889   .1340095   -11.94   0.000    -1.870331   -1.329447
------------------------------------------------------------------------------
. test _Iag4Xsex_2_1 _Iag4Xsex_3_1 _Iag4Xsex_4_1
Adjusted Wald test
 ( 1)  _Iag4Xsex_2_1 = 0
 ( 2)  _Iag4Xsex_3_1 = 0
 ( 3)  _Iag4Xsex_4_1 = 0
       F(  3,    40) =    0.25
            Prob > F =    0.8626
. test _IsexXald_1
Adjusted Wald test

 ( 1)  _IsexXald_1 = 0

       F(  1,    42) =    0.68
            Prob > F =    0.4127

. test _Ied4Xsex_2_1 _Ied4Xsex_3_1 _Ied4Xsex_4_1

Adjusted Wald test
 ( 1)  _Ied4Xsex_2_1 = 0
 ( 2)  _Ied4Xsex_3_1 = 0
 ( 3)  _Ied4Xsex_4_1 = 0
       F(  3,    40) =    0.13
            Prob > F =    0.9444
. test _ImarXsex_2_1 _ImarXsex_3_1
Adjusted Wald test
 ( 1)  _ImarXsex_2_1 = 0
 ( 2)  _ImarXsex_3_1 = 0

       F(  2,    41) =    0.77
            Prob > F =    0.4718
```

```
*comparison of logit, probit and cloglog

. char sex[omit] 2

. xi: svy: logit   ald i.ag4cat i.sex i.ed4cat i.mar3cat
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running logit on estimation sample)

Survey: Logistic regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(   9,     34)    =     23.48
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         ald |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .1462759   .1781311     0.82   0.416    -.2132072     .505759
  _Iag4cat_3 |   -.050707   .1439205    -0.35   0.726    -.3411503    .2397363
  _Iag4cat_4 |  -1.120335   .2124836    -5.27   0.000    -1.549144   -.6915259
     _Isex_1 |   .9979891   .1191044     8.38   0.000     .7576268    1.238351
  _Ied4cat_2 |  -.2684385   .1937281    -1.39   0.173    -.6593975    .1225206
  _Ied4cat_3 |  -.2644809   .1761355    -1.50   0.141    -.6199367    .0909749
  _Ied4cat_4 |  -.7362285   .1971872    -3.73   0.001    -1.134168   -.3382886
 _Imar3cat_2 |   .5178315   .1420638     3.65   0.001     .2311352    .8045277
 _Imar3cat_3 |    .065315   .1687073     0.39   0.701      -.27515    .4057801
       _cons |  -3.124321   .2252724   -13.87   0.000    -3.578939   -2.669703
------------------------------------------------------------------------------

. test _Iag4cat_2 _Iag4cat_3 _Iag4cat_4

Adjusted Wald test

 ( 1)  _Iag4cat_2 = 0
 ( 2)  _Iag4cat_3 = 0
 ( 3)  _Iag4cat_4 = 0

       F(  3,    40) =   12.06
            Prob > F =    0.0000

. test _Ied4cat_2 _Ied4cat_3 _Ied4cat_4

Adjusted Wald test

 ( 1)  _Ied4cat_2 = 0
 ( 2)  _Ied4cat_3 = 0
 ( 3)  _Ied4cat_4 = 0

       F(  3,    40) =    4.80
            Prob > F =    0.0060

. test _Imar3cat_2 _Imar3cat_3

Adjusted Wald test

 ( 1)  _Imar3cat_2 = 0
 ( 2)  _Imar3cat_3 = 0

       F(  2,    41) =    6.54
            Prob > F =    0.0034
```

```
. xi: svy: probit  ald i.ag4cat i.sex i.ed4cat i.mar3cat
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running probit on estimation sample)

Survey: Probit regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(   9,     34)    =     21.17
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         ald |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .0653189   .0846188     0.77   0.444    -.1054487    .2360865
  _Iag4cat_3 |  -.0344724   .0669712    -0.51   0.609    -.1696258     .100681
  _Iag4cat_4 |  -.5312854   .0933035    -5.69   0.000    -.7195794   -.3429913
     _Isex_1 |   .4708444   .0563443     8.36   0.000      .357137    .5845517
  _Ied4cat_2 |  -.1237841   .0950781    -1.30   0.200    -.3156595    .0680912
  _Ied4cat_3 |  -.1243791   .0851594    -1.46   0.152    -.2962377    .0474795
  _Ied4cat_4 |  -.3395563   .0924728    -3.67   0.001    -.5261739   -.1529386
 _Imar3cat_2 |    .254783   .0697718     3.65   0.001     .1139778    .3955882
 _Imar3cat_3 |    .038951   .0770503     0.51   0.616    -.1165427    .1944448
       _cons |  -1.719442   .1053591   -16.32   0.000    -1.932066   -1.506819
------------------------------------------------------------------------------

. test _Iag4cat_2 _Iag4cat_3 _Iag4cat_4

Adjusted Wald test

 ( 1)  _Iag4cat_2 = 0
 ( 2)  _Iag4cat_3 = 0
 ( 3)  _Iag4cat_4 = 0

       F(  3,    40) =   15.26
            Prob > F =    0.0000

. test _Ied4cat_2 _Ied4cat_3 _Ied4cat_4

Adjusted Wald test

 ( 1)  _Ied4cat_2 = 0
 ( 2)  _Ied4cat_3 = 0
 ( 3)  _Ied4cat_4 = 0

       F(  3,    40) =    4.79
            Prob > F =    0.0061

. test _Imar3cat_2 _Imar3cat_3

Adjusted Wald test

 ( 1)  _Imar3cat_2 = 0
 ( 2)  _Imar3cat_3 = 0

       F(  2,    41) =    6.66
            Prob > F =    0.0031
```

```
. xi: svy: cloglog ald i.ag4cat i.sex i.ed4cat i.mar3cat
i.ag4cat          _Iag4cat_1-4        (naturally coded; _Iag4cat_1 omitted)
i.sex             _Isex_1-2           (naturally coded; _Isex_2 omitted)
i.ed4cat          _Ied4cat_1-4        (naturally coded; _Ied4cat_1 omitted)
i.mar3cat         _Imar3cat_1-3       (naturally coded; _Imar3cat_1 omitted)
(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata   =        42                  Number of obs      =      5692
Number of PSUs     =        84                  Population size    = 5692.0005
                                                Design df          =        42
                                                F(   9,     34)    =     24.23
                                                Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
         ald |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  _Iag4cat_2 |   .1430431   .1710567     0.84   0.408    -.2021633    .4882495
  _Iag4cat_3 |  -.0452402   .1396156    -0.32   0.748    -.3269959    .2365155
  _Iag4cat_4 |  -1.082867   .2085918    -5.19   0.000    -1.503822    -.661912
     _Isex_1 |   .9652235   .1150985     8.39   0.000     .7329453    1.197502
  _Ied4cat_2 |  -.2600972   .1849546    -1.41   0.167    -.6333507    .1131562
  _Ied4cat_3 |  -.2555628   .1685477    -1.52   0.137    -.5957057    .0845802
  _Ied4cat_4 |  -.7126507   .1904971    -3.74   0.001    -1.097089   -.3282121
 _Imar3cat_2 |   .4935371   .1356554     3.64   0.001     .2197735    .7673007
 _Imar3cat_3 |   .0604917    .163547     0.37   0.713    -.2695596     .390543
       _cons |  -3.148401   .2176024   -14.47   0.000    -3.587541   -2.709262
------------------------------------------------------------------------------

. test _Iag4cat_2 _Iag4cat_3 _Iag4cat_4

Adjusted Wald test

 ( 1)  [ald]_Iag4cat_2 = 0
 ( 2)  [ald]_Iag4cat_3 = 0
 ( 3)  [ald]_Iag4cat_4 = 0

       F(  3,    40) =   11.52
            Prob > F =    0.0000

. test _Ied4cat_2 _Ied4cat_3 _Ied4cat_4

Adjusted Wald test

 ( 1)  [ald]_Ied4cat_2 = 0
 ( 2)  [ald]_Ied4cat_3 = 0
 ( 3)  [ald]_Ied4cat_4 = 0

       F(  3,    40) =    4.77
            Prob > F =    0.0062

. test _Imar3cat_2 _Imar3cat_3

Adjusted Wald test

 ( 1)  [ald]_Imar3cat_2 = 0
 ( 2)  [ald]_Imar3cat_3 = 0

       F(  2,    41) =    6.50
            Prob > F =    0.0035
```