```
. set seed 1010101

. set matsize 11000

.
.
. *******
.
. *   This script requires pre-installation of spost2 by J. Scott Long for fit
> stat command
. *   It also requires installation of title2.ado, title3.ado
. *
. *      for the fitstat command to function
. ******
.
. global User  "Robert Alan Yaffee"

. * 17 June 2012
.
. *------- Primary objective:  Hypothesis 1 tests for Part 2 of Nottingham hea
> lth profile
.
. *********  Hypothesis tests      Robert A. Yaffee    10 June 2012 main effec
> ts and moderator identification approach
. *  protocol is to test Health profile subscales against potential confounder
> s including socio-demog vars,
. *     major neg life events, stresses and hassles, social supports, perceive
> d health, distance,
. *     threat and dose to see whether there is a dose-psych response
.
. *  We construct a full model, trimmed model (at .1 level), and then test int
> eractions with dose if there is a
. *     significant main effect dose psych response
.
. *     Trimming is performed with backward elimination to the .1 level
. *
```

```
28 . *  This approach identifies the moderating variables for our path analysis.
   >    We analyze our
29 . *     final models for congruence with regression assumptions with the rdiag
   >  program for a validity assessment
30 .
31 . *---------------------------------------------------------------------------
   > -------------------------------
32 .
33 . *----------- Organization of the program -----------------------------------
   > ---------------------------------------
34 . *  main effects regresssions are run for all part 1 health profile subscales
   >  except that of emotional
35 . *    reaction for both males and females separately
36 . *  these models are trimmed with backward elimination to determine whether t
   > he main effect of avg cumulative dose
37 . *     is significant for that wave
38 . *   If the main effect of average cumulative dose for that wave is not stati
   > stically significant with the
39 . *     covariates controlled we do not go further along that path
40 . *   If the main effect of average cumulative dose for that wave is statistic
   > ally significant, we trim the
41 . *     model to a p = .1
42 . *   If average cumulative dose is not significant, we stop
43 . *   If average cumulative dose is significant we perform a hierarchical regr
   > ession with interactions between dose
44 . *      and other significant main effects
45 . *   We proceed to test for mediating effects of those other significant expl
   > anatory variable
46 .
47 . ***-------------------------------------------------------------------------
   > -----------------------------------------
48 .
49 . * Part 2 Nottingham subscales
50 . *  1: hp2work
51 . *  2: hp2hmcare
52 . *  3: hp2probsoc
53 . *  4: hp2pbfhm
```

```
. *  5: hp2sexlife
. *  6: hp2inthob
. *  7: hp2vacatn
.
. local dvwhole HP2work-HP2vacatn

. local dv2 HP2work HP2hmcare HP2probsoc HP2pbfhm HP2sxlife HP2inthob HP2vacat
> n

.
.
.
. *************************************
. di "$User"
Robert Alan Yaffee

.
. title "Testing Hypothesis 1 part 2  wave 2"


******************************************************************************
> *
******************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                Testing Hypothesis 1 part 2  wave 2                 ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                           17 Jun 2012    10:03:05  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

```
67 .
68 . cd /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/H1tests/h1
   > pt2
   /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2

69 . use chwide16june2012, clear
   (Zero for missing on all icdx)

70 . cd /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/H1tests/h1
   > pt2
   /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2

71 .
72 .
73 . di "{hline}"
   ──────────────────────────────────────────────────────────────────────────────

74 . di "{hline}"
   ──────────────────────────────────────────────────────────────────────────────

75 . title2 "Chunk 1 Hyp 1:radiation dose and Nottingham Health profile subscales
   > "
   ──────────────────────────────────────────────────────────────────────────────

   title2: Chunk 1 Hyp 1:radiation dose and Nottingham Health profile subscales
                                          Date and time:  17 Jun 2012    10:03:05
                                          Working directory:  /Users/robertyaffee
   > /Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2
                                          Stata data file:  chwide16june2012.dta
   >  has  2373  variables and  703  observations

   Chunk 1 Hyp 1:radiation dose and Nottingham Health profile subscales
   ──────────────────────────────────────────────────────────────────────────────

76 .
77 .
78 . //  there is substantial intercorrelation among the items warranting a
79 . //  multivariate regression model
```

```
80 . cap dummies educ

81 . cap order educ1-educ8, after(educ)

82 .
83 . * These variables are substantially correlated
84 . pwcorr HP2work HP2hmcare HP2probsoc HP2pbfhm HP2sxlife HP2inthob HP2vacatn,
   > ///
   >    obs sig

             | HP2work HP2hmc~e HP2pro~c HP2pbfhm HP2sxl~e HP2int~b HP2vac~n
-------------+---------------------------------------------------------------
     HP2work |  1.0000
             |
             |     703
             |
   HP2hmcare |  0.4878   1.0000
             |  0.0000
             |     703      703
             |
  HP2probsoc |  0.4587   0.5420   1.0000
             |  0.0000   0.0000
             |     703      703      703
             |
    HP2pbfhm |  0.2832   0.4150   0.4745   1.0000
             |  0.0000   0.0000   0.0000
             |     703      703      703      703
             |
   HP2sxlife |  0.4968   0.4576   0.5589   0.4192   1.0000
             |  0.0000   0.0000   0.0000   0.0000
             |     703      703      703      703      703
             |
   HP2inthob |  0.3787   0.4757   0.5956   0.5089   0.5401   1.0000
             |  0.0000   0.0000   0.0000   0.0000   0.0000
             |     703      703      703      703      703      703
             |
   HP2vacatn |  0.4166   0.4757   0.5956   0.4416   0.5211   0.6840   1.0000
             |  0.0000   0.0000   0.0000   0.0000   0.0000   0.0000
             |     703      703      703      703      703      703      703
             |
```

```
 85 .
 86 . cap gen havmilsq = havmil^2

 87 .
 88 . cap rename Havmil havmil

 89 . //  controlling for potential confounders
 90 . //  socio-demographics age gender educ income occp marstat children inc
 91 . //  distance from accident side
 92 . //  perceived Chornobyl related health threat to oneself
 93 .
 94 . local w1bf bf1 bf4 bf9 bf10 bf11 bf4m bf15m bf20 bf22 bf30 bf40

 95 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

 96 . local w3bf bf1 bf4 bf2 bf4m bf5m bf7m bf8 bf15m bf17 bf20 bf22 bf29 bf30 bf4
    > 0

 97 .
 98 . *----------------------------------------------------------------------------
    > ----
 99 . *  Hypothesis 1   Part 2 Wave 2 tests    male and female
100 . * endogneous Nottingham pt 2 subscales: HP2work HP2hmcare HP2probsoc HP2pbfh
    > m ///
    > *                                        HP2sxlife HP2inthob HP2vacatn
101 . *  structure of models
102 . *    1. general models on all Pt 2 subscales with all potential confounders
103 . *    2. trimmed models on all Pt 2 subscales with from all potential confoun
    > ders
104 . *    3. from trimmed models examination of possible moderator variables
105 . *    4. from trimmed models examination of possible mediator variables
106 . *    5. Summary analysis and model evaluation of final models only
107 . *   program is divided into 8 chunks one a general model and 1 for each
108 . *       endogenous variable
109 . *----------------------------------------------------------------------------
    > ----
110 . * Chunk 1  General models for all part 2 of Nottingham Health Profile
```

```
111 .
112 .
113 . forvalues j=2/2 {
      2. des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
    >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
      3.   }

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------

    age             double %8.0g                * Respondent's age
    educ1           byte   %8.0g                  educ==1. did not graduate high
                                                    school
    educ2           byte   %8.0g                  educ==2. graduated high school
    educ3           byte   %8.0g                  educ==3. technical degree
    educ4           byte   %8.0g                  educ==4. did not finish
                                                    college/bachelor's
    educ5           byte   %8.0g                  educ==5. graduated
                                                    college/bachelor's
    educ6           byte   %8.0g                  educ==6. finished
                                                    specialist/master's degree
    educ7           byte   %8.0g                  educ==7. doctor of science/phd
    marrw21         byte   %8.0g                  marrw2==1. single
    marrw22         byte   %8.0g                  marrw2==2. cohabitating
    marrw23         byte   %8.0g                  marrw2==3. married
    marrw24         byte   %8.0g                  marrw2==4. separated
    marrw25         byte   %8.0g                  marrw2==5. divorced
    marrw26         byte   %8.0g                  marrw2==6. widowed
    inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                    basic neccessities in 1996
    inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                    basic neccessities in 1996
    inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                    plus extra purchases/savings
                                                    in 1996
    inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                    afford luxury items in 1996
    bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf9             float  %9.0g                  bf9= max(0, 30 - shhlw1)
    bf11            float  %9.0g                  bf11= max(0, 20 - sufamw1)
    bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
    bf15m           float  %9.0g                  bf15m= max(0, 1 - icdxcnt) * bf2
    bf30            float  %9.0g                  bf30 = max(0, neiw1 - 85) * bf20
    bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                    1.01635E-007)
```

```
114 .
115 .
116 . title " H1: Test of hypothesis 1: Pt 2 wave 2 general models"


    *****************************************************************************
    > *
    *****************************************************************************
    > *
    *****                                                                   ****
    > *
    *****                                                                   ****
    > *
    *****       H1: Test of hypothesis 1: Pt 2 wave 2 general models        ****
    > *
    *****                                                                   ****
    > *
    *****                                                                   ****
    > *
    *****                                         17 Jun 2012    10:03:05   ****
    > *
    *****************************************************************************
    > *
    *****************************************************************************
    > *



117 . forvalues j = 2/2 {
  2. set more off
  3.   foreach var in HP2work HP2hmcare HP2probsoc HP2pbfhm HP2sxlife HP2intho
    > b ///
    >       HP2vacatn  {
  4.       forvalues k=1/2 {
  5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  6. di _skip(4)
  7.
```

```
118 . title4 "Full main model for `var' for wave= `j' "
      8. di _skip(4)
      9. title4 "chunk 2 H1 test:Gender= `k'  model Wave =  `j' for `e(depvar)' "
     10. di _skip(4)
     11. title4 "Full Nottingham Part 2 `var' subscale models" "wave `j' for gende
    > r==`k'"
     12.
119 .       xi: logit `var' age i.educ occ1w`j'-occ8w`j' ///
    >                marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
    > //
    >                radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
    >                 deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
    >                illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
    > chrw`j' ///
    >                 havmilsq if gender==`k',  difficult iterate(500) nolog
     13.                         estat class
     14.                         estat gof
     15.                         fitstat
     16. }
     17. }
     18. }

    ------------------------------------------------------------------------------
    Full main model for HP2work for wave= 2
    ------------------------------------------------------------------------------


    ------------------------------------------------------------------------------
    chunk 2 H1 test:Gender= 1  model Wave =  2 for hp2work
    ------------------------------------------------------------------------------


    ------------------------------------------------------------------------------
    Full Nottingham Part 2 HP2work subscale models
    ------------------------------------------------------------------------------
    i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
    note: _Ieduc_4 != 0 predicts failure perfectly
          _Ieduc_4 dropped and 12 obs not used

    note: _Ieduc_7 != 0 predicts failure perfectly
          _Ieduc_7 dropped and 4 obs not used

    note: _Ieduc_8 != 0 predicts failure perfectly
          _Ieduc_8 dropped and 2 obs not used

    note: sepaw2 != 0 predicts failure perfectly
          sepaw2 dropped and 6 obs not used

    note: _Ieduc_6 omitted because of collinearity
    note: bf15 omitted because of collinearity
```

```
Logistic regression                             Number of obs   =        308
                                                LR chi2(42)     =     109.94
                                                Prob > chi2     =     0.0000
Log likelihood = -106.34944                     Pseudo R2       =     0.3408
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	-.0001692	.02372	-0.01	0.994	-.0466595	.0463212
_Ieduc_2	.9181743	1.013818	0.91	0.365	-1.068872	2.90522
_Ieduc_3	-.0025163	.4641718	-0.01	0.996	-.9122764	.9072438
_Ieduc_4	0	(omitted)				
_Ieduc_5	.7217689	.6474494	1.11	0.265	-.5472086	1.990746
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-2.033983	2.039062	-1.00	0.319	-6.030472	1.962506
occ2w2	-1.10022	2.055368	-0.54	0.592	-5.128666	2.928227
occ3w2	-1.57744	2.098973	-0.75	0.452	-5.691352	2.536471
occ4w2	-.7778101	2.07516	-0.37	0.708	-4.845048	3.289428
occ5w2	-.1994034	2.080334	-0.10	0.924	-4.276783	3.877976
occ6w2	.5724938	2.922442	0.20	0.845	-5.155386	6.300374
occ7w2	1.385601	2.162361	0.64	0.522	-2.852549	5.623751
occ8w2	-2.621626	2.185931	-1.20	0.230	-6.905973	1.66272
marrw21	14.46418	1445.103	0.01	0.992	-2817.886	2846.815
marrw22	16.06999	1445.104	0.01	0.991	-2816.281	2848.421
marrw23	13.00974	1445.103	0.01	0.993	-2819.341	2845.36
marrw25	15.20349	1445.106	0.01	0.992	-2817.151	2847.558
marrw26	11.50222	1445.104	0.01	0.994	-2820.85	2843.855
inc1w2	-1.510512	2.275504	-0.66	0.507	-5.970418	2.949394
inc2w2	-.2432446	2.068579	-0.12	0.906	-4.297585	3.811096
inc3w2	1.229267	2.059579	0.60	0.551	-2.807434	5.265968
inc4w2	.0340459	2.516571	0.01	0.989	-4.898343	4.966435
radhlw2	-.0036868	.0074975	-0.49	0.623	-.0183817	.0110081
havmil	.0013907	.0046392	0.30	0.764	-.0077019	.0104833
avgcumdosew2	.0423433	.0838158	0.51	0.613	-.1219326	.2066192
bf1	-.0106479	.0111601	-0.95	0.340	-.0325212	.0112255
bf4	-.1742962	.0530725	-3.28	0.001	-.2783165	-.070276
bf6	.0126216	.0084824	1.49	0.137	-.0040036	.0292468
bf7	.1335412	.0775552	1.72	0.085	-.0184641	.2855465
bf14	.000083	.0000711	1.17	0.243	-.0000564	.0002224
bf15	0	(omitted)				
bf40	.4649883	.132263	3.52	0.000	.2057576	.724219
deaw2	.0562824	.3164534	0.18	0.859	-.5639548	.6765196
dvcew2	.8659697	2.382497	0.36	0.716	-3.803639	5.535578
sepaw2	0	(omitted)				
accdw2	.5552759	.4404199	1.26	0.207	-.3079312	1.418483
movew2	.6056941	.4689768	1.29	0.197	-.3134835	1.524872
illw2	-.0279332	.3103275	-0.09	0.928	-.6361639	.5802975

shfamw2	.0059196	.0069893	0.85	0.397	-.0077792	.0196183
shhlw2	.0168978	.0087333	1.93	0.053	-.000219	.0340147
shjobw2	-.0044984	.0081883	-0.55	0.583	-.0205472	.0115504
shrelaw2	-.0237032	.0083387	-2.84	0.004	-.0400468	-.0073596
suprtw2	-.0017568	.0059642	-0.29	0.768	-.0134464	.0099328
suchrw2	.003038	.005693	0.53	0.594	-.00812	.014196
havmilsq	-1.38e-06	6.35e-06	-0.22	0.828	-.0000138	.0000111
_cons	-14.33587	1445.105	-0.01	0.992	-2846.689	2818.017

Logistic model for HP2work

	True		
Classified	D	~D	Total
+	35	13	48
-	32	228	260
Total	67	241	308

Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0

Sensitivity	Pr(+| D)	52.24%
Specificity	Pr(-|~D)	94.61%
Positive predictive value	Pr(D| +)	72.92%
Negative predictive value	Pr(~D| -)	87.69%
False + rate for true ~D	Pr(+|~D)	5.39%
False - rate for true D	Pr(-| D)	47.76%
False + rate for classified +	Pr(~D| +)	27.08%
False - rate for classified -	Pr(D| -)	12.31%
Correctly classified		85.39%

Logistic model for HP2work, goodness-of-fit test

number of observations = 308
number of covariate patterns = 308
Pearson chi2(265) = 283.15
Prob > chi2 = 0.2119

Measures of Fit for **logit** of **HP2work**

```
Log-Lik Intercept Only:      -161.320    Log-Lik Full Model:           -106.349
D(259):                       212.699    LR(42):                        109.942
                                         Prob > LR:                       0.000
McFadden's R2:                  0.341    McFadden's Adj R2:               0.037
Maximum Likelihood R2:          0.300    Cragg & Uhler's R2:              0.462
McKelvey and Zavoina's R2:      0.625    Efron's R2:                      0.371
Variance of y*:                 8.782    Variance of error:               3.290
Count R2:                       0.854    Adj Count R2:                    0.328
AIC:                            1.009    AIC*n:                         310.699
BIC:                        -1271.397    BIC':                          130.723
```

Full main model for HP2work for wave= 2

---

chunk 2 H1 test:Gender= 2 model Wave = 2 for HP2work

Full Nottingham Part 2 HP2work subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 8 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        354
                                                  LR chi2(44)     =     104.77
                                                  Prob > chi2     =     0.0000
Log likelihood = -150.43517                       Pseudo R2       =     0.2583
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0369848	.0167931	2.20	0.028	.0040708	.0698987
_Ieduc_2	-13.278	655.1046	-0.02	0.984	-1297.259	1270.703
_Ieduc_3	-13.76722	655.1045	-0.02	0.983	-1297.749	1270.214
_Ieduc_4	-12.56241	655.1048	-0.02	0.985	-1296.544	1271.419
_Ieduc_5	-14.16942	655.1047	-0.02	0.983	-1298.151	1269.812
_Ieduc_6	-13.46911	655.1045	-0.02	0.984	-1297.45	1270.512
_Ieduc_7	-13.6852	655.1071	-0.02	0.983	-1297.672	1270.301
_Ieduc_8	0	(omitted)				
occ1w2	-1.431885	1.490412	-0.96	0.337	-4.353039	1.48927
occ2w2	-1.067234	1.511451	-0.71	0.480	-4.029624	1.895156
occ3w2	-.6094536	1.500907	-0.41	0.685	-3.551177	2.33227

occ4w2	-.7773088	1.581059	-0.49	0.623	-3.876128	2.321511
occ5w2	-1.784723	1.846534	-0.97	0.334	-5.403863	1.834417
occ6w2	-1.506062	1.711274	-0.88	0.379	-4.860097	1.847973
occ7w2	-.374184	1.45347	-0.26	0.797	-3.222934	2.474566
occ8w2	-.0539674	1.70334	-0.03	0.975	-3.392452	3.284517
marrw21	-.7235313	1.007239	-0.72	0.473	-2.697684	1.250621
marrw22	-.7861921	1.258786	-0.62	0.532	-3.253367	1.680983
marrw23	-.156903	.704389	-0.22	0.824	-1.53748	1.223674
marrw25	-.4149071	1.124423	-0.37	0.712	-2.618736	1.788922
marrw26	0	(omitted)				
inc1w2	-.3011188	1.506651	-0.20	0.842	-3.2541	2.651862
inc2w2	.2687204	1.456307	0.18	0.854	-2.585589	3.12303
inc3w2	1.036312	1.469535	0.71	0.481	-1.843923	3.916546
inc4w2	-.1137536	1.952911	-0.06	0.954	-3.941389	3.713882
radhlw2	.0092993	.0058818	1.58	0.114	-.0022288	.0208273
havmil	-.0020615	.0026074	-0.79	0.429	-.0071719	.0030489
avgcumdosew2	.0807064	.0968033	0.83	0.404	-.1090246	.2704374
bf1	-.004698	.0078862	-0.60	0.551	-.0201547	.0107586
bf4	-.1182241	.0355711	-3.32	0.001	-.1879422	-.0485059
bf6	.001791	.0066699	0.27	0.788	-.0112818	.0148637
bf7	-.0450377	.0737224	-0.61	0.541	-.1895309	.0994556
bf14	-.0001102	.0000711	-1.55	0.121	-.0002496	.0000292
bf15	0	(omitted)				
bf40	.0952395	.072172	1.32	0.187	-.046215	.236694
deaw2	.164384	.1960927	0.84	0.402	-.2199507	.5487186
dvcew2	-.2821707	1.333785	-0.21	0.832	-2.89634	2.331999
sepaw2	0	(omitted)				
accdw2	.6916732	.4937096	1.40	0.161	-.2759799	1.659326
movew2	-.1373653	.5055449	-0.27	0.786	-1.128215	.8534845
illw2	.1336732	.1739566	0.77	0.442	-.2072754	.4746219
shfamw2	-.0053174	.0059668	-0.89	0.373	-.0170122	.0063773
shhlw2	.0054362	.0062416	0.87	0.384	-.0067971	.0176695
shjobw2	-.0006072	.0057431	-0.11	0.916	-.0118635	.0106491
shrelaw2	-.0064495	.0065479	-0.98	0.325	-.0192832	.0063841
suprtw2	-.0047857	.0047915	-1.00	0.318	-.0141769	.0046055
suchrw2	.009761	.0053132	1.84	0.066	-.0006528	.0201747
havmilsq	2.04e-07	1.76e-06	0.12	0.908	-3.25e-06	3.65e-06
_cons	11.57916	655.1066	0.02	0.986	-1272.406	1295.565

Logistic model for HP2work

Classified	True D	True ~D	Total
+	**44**	**21**	**65**
-	**48**	**241**	**289**
Total	**92**	**262**	**354**

Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0

Sensitivity	Pr(+| D)	**47.83%**
Specificity	Pr(-|~D)	**91.98%**
Positive predictive value	Pr(D| +)	**67.69%**
Negative predictive value	Pr(~D| -)	**83.39%**
False + rate for true ~D	Pr(+|~D)	**8.02%**
False - rate for true D	Pr(-| D)	**52.17%**
False + rate for classified +	Pr(~D| +)	**32.31%**
False - rate for classified -	Pr(D| -)	**16.61%**
Correctly classified		**80.51%**

Logistic model for HP2work, goodness-of-fit test

```
       number of observations =       354
 number of covariate patterns =       354
             Pearson chi2(309) =       452.09
                   Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2work**

Log-Lik Intercept Only:	**-202.820**	Log-Lik Full Model:	**-150.435**
D(305):	**300.870**	LR(44):	**104.770**
		Prob > LR:	**0.000**
McFadden's R2:	**0.258**	McFadden's Adj R2:	**0.017**
Maximum Likelihood R2:	**0.256**	Cragg & Uhler's R2:	**0.376**
McKelvey and Zavoina's R2:	**0.477**	Efron's R2:	**0.297**
Variance of y*:	**6.291**	Variance of error:	**3.290**
Count R2:	**0.805**	Adj Count R2:	**0.250**
AIC:	**1.127**	AIC*n:	**398.870**
BIC:	**-1489.265**	BIC':	**153.479**

Full main model for HP2hmcare for wave= 2 chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2work

Full Nottingham Part 2 HP2hmcare subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 6 obs not used

note: _Ieduc_7 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        269
                                                  LR chi2(42)     =     109.76
                                                  Prob > chi2     =     0.0000
Log likelihood = -97.204962                       Pseudo R2       =     0.3609
```

HP2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0338165	.0226356	1.49	0.135	-.0105484	.0781815
_Ieduc_2	-4.276213	1.974151	-2.17	0.030	-8.145479	-.406947
_Ieduc_3	-2.496446	1.569642	-1.59	0.112	-5.572887	.579995
_Ieduc_4	0	(omitted)				
_Ieduc_5	-1.933257	1.595074	-1.21	0.226	-5.059545	1.193031
_Ieduc_6	-2.731404	1.5115	-1.81	0.071	-5.693888	.2310807
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	.447866	3.337423	0.13	0.893	-6.093362	6.989094
occ2w2	-.0398	3.356232	-0.01	0.991	-6.617893	6.538293
occ3w2	.5016738	3.37088	0.15	0.882	-6.105129	7.108476
occ4w2	.4812856	3.378935	0.14	0.887	-6.141306	7.103877
occ5w2	1.51252	3.404132	0.44	0.657	-5.159455	8.184496
occ6w2	2.9603	3.825064	0.77	0.439	-4.536687	10.45729
occ7w2	.5681102	3.446364	0.16	0.869	-6.186638	7.322859
occ8w2	0	(omitted)				
marrw21	-1.554879	1.682488	-0.92	0.355	-4.852495	1.742737
marrw22	-3.80953	2.028746	-1.88	0.060	-7.785799	.1667393

marrw23	-3.665421	1.71283	-2.14	0.032	-7.022506	-.3083347
marrw25	-1.481731	4.126728	-0.36	0.720	-9.56997	6.606508
marrw26	-2.880741	2.479902	-1.16	0.245	-7.741261	1.979778
inc1w2	2.844486	3.430733	0.83	0.407	-3.879627	9.568599
inc2w2	2.655327	3.349177	0.79	0.428	-3.908939	9.219593
inc3w2	3.052721	3.355091	0.91	0.363	-3.523137	9.628579
inc4w2	1.171678	3.639724	0.32	0.748	-5.96205	8.305406
radhlw2	-.0026842	.0077227	-0.35	0.728	-.0178205	.0124521
havmil	.002871	.0081498	0.35	0.725	-.0131023	.0188444
avgcumdosew2	-.0220473	.0954292	-0.23	0.817	-.2090852	.1649906
bf1	-.0176257	.0110209	-1.60	0.110	-.0392262	.0039748
bf4	-.3209329	.0601062	-5.34	0.000	-.4387388	-.203127
bf6	.0142094	.0096047	1.48	0.139	-.0046155	.0330342
bf7	.1041093	.0843677	1.23	0.217	-.0612484	.269467
bf14	5.78e-06	.0000736	0.08	0.937	-.0001386	.0001501
bf15	0	(omitted)				
bf40	.3500268	.1396049	2.51	0.012	.0764063	.6236473
deaw2	.0522034	.3200036	0.16	0.870	-.5749921	.6793989
dvcew2	-.370905	3.78656	-0.10	0.922	-7.792426	7.050615
sepaw2	0	(omitted)				
accdw2	.1929199	.4604851	0.42	0.675	-.7096143	1.095454
movew2	.2586331	.5214207	0.50	0.620	-.7633328	1.280599
illw2	-.1291222	.3453441	-0.37	0.708	-.8059842	.5477398
shfamw2	-.0123461	.0080757	-1.53	0.126	-.0281741	.0034819
shhlw2	-.0067088	.0095447	-0.70	0.482	-.0254161	.0119985
shjobw2	-.0001525	.009703	-0.02	0.987	-.0191701	.018865
shrelaw2	.0044873	.0074837	0.60	0.549	-.0101805	.0191551
suprtw2	.0138227	.0067373	2.05	0.040	.0006178	.0270276
suchrw2	-.0024443	.0059474	-0.41	0.681	-.0141011	.0092124
havmilsq	-7.11e-06	.0000151	-0.47	0.639	-.0000368	.0000226
_cons	1.915103	3.160353	0.61	0.545	-4.279075	8.109282

Logistic model for HP2hmcare

	True		
Classified	D	~D	Total
+	38	14	52
-	30	187	217
Total	68	201	269

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2hmcare != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   55.88%
Specificity                     Pr( -|~D)   93.03%
Positive predictive value       Pr( D| +)   73.08%
Negative predictive value       Pr(~D| -)   86.18%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    6.97%
False - rate for true D         Pr( -| D)   44.12%
False + rate for classified +   Pr(~D| +)   26.92%
False - rate for classified -   Pr( D| -)   13.82%
--------------------------------------------------
Correctly classified                        83.64%
--------------------------------------------------

Logistic model for HP2hmcare, goodness-of-fit test
--------------------------------------------------

       number of observations =       269
 number of covariate patterns =       269
            Pearson chi2(226) =       228.79
                  Prob > chi2 =         0.4356

Measures of Fit for logit of HP2hmcare

Log-Lik Intercept Only:     -152.087    Log-Lik Full Model:            -97.205
D(220):                      194.410    LR(42):                        109.763
                                        Prob > LR:                       0.000
McFadden's R2:                 0.361    McFadden's Adj R2:               0.039
Maximum Likelihood R2:         0.335    Cragg & Uhler's R2:              0.495
McKelvey and Zavoina's R2:     0.599    Efron's R2:                      0.381
Variance of y*:                8.208    Variance of error:               3.290
Count R2:                      0.836    Adj Count R2:                    0.353
AIC:                           1.087    AIC*n:                         292.410
BIC:                       -1036.427    BIC':                          125.215

------------------------------------------------------------------------------
Full main model for HP2hmcare for wave= 2
------------------------------------------------------------------------------

------------------------------------------------------------------------------
chunk 2 H1 test:Gender= 2  model Wave =  2 for HP2hmcare
------------------------------------------------------------------------------

------------------------------------------------------------------------------
Full Nottingham Part 2 HP2hmcare subscale models
------------------------------------------------------------------------------
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
```

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression	Number of obs = **362**
	LR chi2(**45**) = **176.34**
	Prob > chi2 = **0.0000**
Log likelihood = **-144.48759**	Pseudo R2 = **0.3790**

HP2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0738943	.0179039	4.13	0.000	.0388033	.1089852
_Ieduc_2	-14.47538	1273.657	-0.01	0.991	-2510.798	2481.847
_Ieduc_3	-15.05547	1273.657	-0.01	0.991	-2511.378	2481.267
_Ieduc_4	-13.48341	1273.657	-0.01	0.992	-2509.806	2482.839
_Ieduc_5	-14.88762	1273.657	-0.01	0.991	-2511.21	2481.435
_Ieduc_6	-15.58826	1273.657	-0.01	0.990	-2511.911	2480.734
_Ieduc_7	-13.81171	1273.659	-0.01	0.991	-2510.137	2482.513
_Ieduc_8	0	(omitted)				
occ1w2	-2.359905	1.509597	-1.56	0.118	-5.318661	.5988504
occ2w2	-2.373759	1.546944	-1.53	0.125	-5.405713	.6581945
occ3w2	-1.535666	1.553674	-0.99	0.323	-4.58081	1.509479
occ4w2	-2.972204	1.655316	-1.80	0.073	-6.216564	.2721556
occ5w2	-4.352791	1.883178	-2.31	0.021	-8.043752	-.6618289
occ6w2	-5.059677	2.021732	-2.50	0.012	-9.022199	-1.097155
occ7w2	-1.364295	1.545156	-0.88	0.377	-4.392746	1.664156
occ8w2	-.5789576	1.792303	-0.32	0.747	-4.091808	2.933892
marrw21	-.0690078	1.129464	-0.06	0.951	-2.282717	2.144702
marrw22	.7043443	1.44356	0.49	0.626	-2.124982	3.533671
marrw23	2.097285	.8281102	2.53	0.011	.4742186	3.720351
marrw25	.9609574	1.20757	0.80	0.426	-1.405836	3.327751
marrw26	0	(omitted)				
inc1w2	2.105274	1.594442	1.32	0.187	-1.019775	5.230323
inc2w2	3.407471	1.542788	2.21	0.027	.3836621	6.43128
inc3w2	2.870172	1.549672	1.85	0.064	-.1671285	5.907473
inc4w2	3.606463	1.894634	1.90	0.057	-.1069505	7.319876
radhlw2	-.0068123	.0061828	-1.10	0.271	-.0189302	.0053057
havmil	.0011484	.0030211	0.38	0.704	-.0047728	.0070696
avgcumdosew2	-.2667926	.1232968	-2.16	0.030	-.5084499	-.0251353
bf1	-.0183931	.0079003	-2.33	0.020	-.0338774	-.0029088
bf4	-.2337773	.0416245	-5.62	0.000	-.3153598	-.1521948
bf6	.0040038	.0067939	0.59	0.556	-.009312	.0173196
bf7	-.126659	.0709704	-1.78	0.074	-.2657584	.0124404
bf14	-.0000228	.0000659	-0.35	0.729	-.0001521	.0001064
bf15	0	(omitted)				
bf40	.0786288	.0758899	1.04	0.300	-.0701127	.2273704
deaw2	.6463714	.2506264	2.58	0.010	.1551526	1.13759
dvcew2	1.46465	1.066188	1.37	0.170	-.6250398	3.554339

sepaw2	-1.747364	1.628008	-1.07	0.283	-4.938201	1.443472
accdw2	-.6760904	.5387942	-1.25	0.210	-1.732108	.3799268
movew2	-.5261615	.493185	-1.07	0.286	-1.492786	.4404633
illw2	-.1619986	.1844507	-0.88	0.380	-.5235154	.1995182
shfamw2	-.0039886	.0060041	-0.66	0.506	-.0157565	.0077793
shhlw2	-.0091905	.0062486	-1.47	0.141	-.0214375	.0030565
shjobw2	.0003458	.0057176	0.06	0.952	-.0108605	.011552
shrelaw2	-.0091776	.006756	-1.36	0.174	-.0224192	.0040639
suprtw2	-.0077623	.0046946	-1.65	0.098	-.0169635	.0014389
suchrw2	.0040413	.0050755	0.80	0.426	-.0059065	.013989
havmilsq	-1.23e-06	2.83e-06	-0.44	0.664	-6.79e-06	4.32e-06
_cons	12.31935	1273.659	0.01	0.992	-2484.005	2508.644

Logistic model for HP2hmcare

	True		
Classified	D	~D	Total
+	85	27	112
-	39	211	250
Total	124	238	362

Classified + if predicted Pr(D) >= .5
True D defined as HP2hmcare != 0

Sensitivity	Pr(+| D)	68.55%
Specificity	Pr(-|~D)	88.66%
Positive predictive value	Pr(D| +)	75.89%
Negative predictive value	Pr(~D| -)	84.40%
False + rate for true ~D	Pr(+|~D)	11.34%
False - rate for true D	Pr(-| D)	31.45%
False + rate for classified +	Pr(~D| +)	24.11%
False - rate for classified -	Pr(D| -)	15.60%
Correctly classified		81.77%

Logistic model for HP2hmcare, goodness-of-fit test

number of observations = 362
number of covariate patterns = 362
Pearson chi2(316) = 339.77
Prob > chi2 = 0.1713

```
Measures of Fit for logit of HP2hmcare

Log-Lik Intercept Only:     -232.660   Log-Lik Full Model:          -144.488
D(313):                      288.975   LR(45):                       176.345
                                       Prob > LR:                      0.000
McFadden's R2:                 0.379   McFadden's Adj R2:              0.168
Maximum Likelihood R2:         0.386   Cragg & Uhler's R2:             0.533
McKelvey and Zavoina's R2:     0.660   Efron's R2:                     0.429
Variance of y*:                9.672   Variance of error:              3.290
Count R2:                      0.818   Adj Count R2:                   0.468
AIC:                           1.069   AIC*n:                        386.975
BIC:                       -1555.109   BIC':                          88.779
```

Full main model for HP2probsoc for wave= 2

---

chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2hmcare

Full Nottingham Part 2 HP2probsoc subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ7w2 != 0 predicts failure perfectly
      occ7w2 dropped and 14 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used
```

```
note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 1 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        228
                                                  LR chi2(34)     =     103.91
                                                  Prob > chi2     =     0.0000
Log likelihood =  -52.36582                       Pseudo R2       =     0.4980
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0906854	.0339814	2.67	0.008	.0240831	.1572876
_Ieduc_2	-.0346926	1.161856	-0.03	0.976	-2.311888	2.242503
_Ieduc_3	-.6886648	.7207042	-0.96	0.339	-2.101219	.7238895
_Ieduc_4	0	(omitted)				
_Ieduc_5	.9759744	1.063631	0.92	0.359	-1.108703	3.060652
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-.9172264	10.67202	-0.09	0.932	-21.83401	19.99955
occ2w2	-.7254984	10.66823	-0.07	0.946	-21.63485	20.18385
occ3w2	-.6714679	10.68886	-0.06	0.950	-21.62126	20.27832
occ4w2	-2.239171	10.70842	-0.21	0.834	-23.22728	18.74894
occ5w2	-.9195542	10.71455	-0.09	0.932	-21.91968	20.08057
occ6w2	0	(omitted)				
occ7w2	0	(omitted)				
occ8w2	0	(omitted)				
marrw21	11.0684	1379.375	0.01	0.994	-2692.457	2714.594
marrw22	0	(omitted)				
marrw23	8.945925	1379.375	0.01	0.995	-2694.579	2712.471
marrw25	0	(omitted)				
marrw26	0	(omitted)				
inc1w2	.3641243	10.76623	0.03	0.973	-20.7373	21.46555
inc2w2	1.742499	10.67327	0.16	0.870	-19.17672	22.66172
inc3w2	3.371881	10.68463	0.32	0.752	-17.56961	24.31337
inc4w2	0	(omitted)				
radhlw2	.0085407	.0114129	0.75	0.454	-.0138281	.0309095

havmil	-.0006807	.0078287	-0.09	0.931	-.0160246	.0146632
avgcumdosew2	.099739	.0947343	1.05	0.292	-.0859367	.2854148
bf1	.0048596	.0179991	0.27	0.787	-.0304181	.0401372
bf4	-.3368708	.0845017	-3.99	0.000	-.5024911	-.1712504
bf6	.0294921	.0150976	1.95	0.051	-.0000987	.0590829
bf7	.2107792	.1280115	1.65	0.100	-.0401186	.4616771
bf14	-.0000508	.0001111	-0.46	0.648	-.0002685	.0001669
bf15	0	(omitted)				
bf40	.3587504	.202109	1.78	0.076	-.0373759	.7548768
deaw2	-.2425986	.5320938	-0.46	0.648	-1.285483	.8002861
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	-.0583869	.772113	-0.08	0.940	-1.571701	1.454927
movew2	.534895	.8346364	0.64	0.522	-1.100962	2.170752
illw2	.3093012	.430894	0.72	0.473	-.5352355	1.153838
shfamw2	-.0138199	.0107438	-1.29	0.198	-.0348774	.0072375
shhlw2	-.0108054	.0127581	-0.85	0.397	-.0358108	.0141999
shjobw2	.024033	.0121387	1.98	0.048	.0002416	.0478244
shrelaw2	-.0263531	.0111814	-2.36	0.018	-.0482683	-.0044379
suprtw2	.0130386	.0099595	1.31	0.190	-.0064816	.0325589
suchrw2	.0121677	.0099924	1.22	0.223	-.007417	.0317524
havmilsq	4.68e-06	9.92e-06	0.47	0.637	-.0000148	.0000241
_cons	-18.63366	1379.378	-0.01	0.989	-2722.164	2684.897

Logistic model for HP2probsoc

	True		
Classified	D	~D	Total
+	27	4	31
-	12	185	197
Total	39	189	228

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	69.23%
Specificity	Pr(-|~D)	97.88%
Positive predictive value	Pr(D| +)	87.10%
Negative predictive value	Pr(~D| -)	93.91%
False + rate for true ~D	Pr(+|~D)	2.12%
False - rate for true D	Pr(-| D)	30.77%
False + rate for classified +	Pr(~D| +)	12.90%
False - rate for classified -	Pr(D| -)	6.09%
Correctly classified		92.98%

Logistic model for HP2probsoc, goodness-of-fit test

```
       number of observations =       228
 number of covariate patterns =       228
            Pearson chi2(193) =       730.19
                  Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2probsoc**

```
Log-Lik Intercept Only:     -104.322    Log-Lik Full Model:          -52.366
D(179):                      104.732    LR(34):                      103.912
                                        Prob > LR:                     0.000
McFadden's R2:                 0.498    McFadden's Adj R2:             0.028
Maximum Likelihood R2:         0.366    Cragg & Uhler's R2:            0.611
McKelvey and Zavoina's R2:     0.779    Efron's R2:                    0.554
Variance of y*:               14.912    Variance of error:             3.290
Count R2:                      0.930    Adj Count R2:                  0.590
AIC:                           0.889    AIC*n:                       202.732
BIC:                        -867.121    BIC':                         80.686
```

Full main model for HP2probsoc for wave= 2

chunk 2 H1 test:Gender= 2 model Wave = 2 for HP2probsoc

Full Nottingham Part 2 HP2probsoc subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 9 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        353
                                                  LR chi2(44)     =     173.44
                                                  Prob > chi2     =     0.0000
Log likelihood = -93.198778                       Pseudo R2       =     0.4820
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.1045505	.025349	4.12	0.000	.0548673	.1542337
_Ieduc_2	-12.29812	1030.765	-0.01	0.990	-2032.56	2007.964
_Ieduc_3	-12.54704	1030.765	-0.01	0.990	-2032.809	2007.715
_Ieduc_4	-11.69817	1030.765	-0.01	0.991	-2031.96	2008.564
_Ieduc_5	-11.74738	1030.765	-0.01	0.991	-2032.009	2008.515
_Ieduc_6	-12.89754	1030.765	-0.01	0.990	-2033.159	2007.364
_Ieduc_7	-14.11644	1030.817	-0.01	0.989	-2034.481	2006.248
_Ieduc_8	0	(omitted)				
occ1w2	-1.104757	3.60974	-0.31	0.760	-8.179718	5.970203
occ2w2	-1.202019	3.652886	-0.33	0.742	-8.361544	5.957506
occ3w2	.0703933	3.628444	0.02	0.985	-7.041227	7.182014
occ4w2	-1.52192	3.712086	-0.41	0.682	-8.797475	5.753635
occ5w2	-2.24588	3.84541	-0.58	0.559	-9.782745	5.290985
occ6w2	0	(omitted)				
occ7w2	-.4840598	3.61697	-0.13	0.894	-7.573191	6.605072
occ8w2	2.167215	3.89814	0.56	0.578	-5.472999	9.807428
marrw21	-.4201784	1.629029	-0.26	0.796	-3.613016	2.772659
marrw22	1.086175	1.72569	0.63	0.529	-2.296115	4.468466
marrw23	.7750978	.9250885	0.84	0.402	-1.038042	2.588238
marrw25	.532399	1.287582	0.41	0.679	-1.991215	3.056013
marrw26	0	(omitted)				
inc1w2	.0603839	3.624166	0.02	0.987	-7.042851	7.163619
inc2w2	.8383333	3.595272	0.23	0.816	-6.20827	7.884937
inc3w2	.536243	3.60018	0.15	0.882	-6.519981	7.592467
inc4w2	.2312155	3.842475	0.06	0.952	-7.299898	7.762329
radhlw2	.0147911	.0081819	1.81	0.071	-.0012451	.0308272
havmil	.0022418	.0072934	0.31	0.759	-.0120531	.0165366
avgcumdosew2	.4925829	.2091227	2.36	0.018	.0827098	.9024559
bf1	-.0161664	.0113442	-1.43	0.154	-.0384006	.0060677
bf4	-.2331375	.0505589	-4.61	0.000	-.332231	-.1340439
bf6	.0021871	.0094776	0.23	0.817	-.0163887	.0207629
bf7	-.0615381	.1064342	-0.58	0.563	-.2701454	.1470692
bf14	8.31e-06	.0000929	0.09	0.929	-.0001737	.0001903
bf15	0	(omitted)				
bf40	-.005756	.0971846	-0.06	0.953	-.1962344	.1847223
deaw2	-.0331928	.2378427	-0.14	0.889	-.499356	.4329704
dvcew2	1.930249	1.72923	1.12	0.264	-1.45898	5.319477
sepaw2	-1.211648	2.172861	-0.56	0.577	-5.470378	3.047082
accdw2	-.6584952	.7729357	-0.85	0.394	-2.173421	.8564309
movew2	-.3688091	.9599148	-0.38	0.701	-2.250208	1.512589
illw2	.0217672	.2703514	0.08	0.936	-.5081118	.5516462
shfamw2	-.0185511	.0084341	-2.20	0.028	-.0350816	-.0020206
shhlw2	.0005321	.0080879	0.07	0.948	-.0153199	.0163841
shjobw2	-.0024716	.0076938	-0.32	0.748	-.0175512	.0126079
shrelaw2	-.0052827	.0086543	-0.61	0.542	-.0222447	.0116794
suprtw2	.0005602	.0066528	0.08	0.933	-.012479	.0135994

suchrw2	-.0036935	.00718	-0.51	0.607	-.017766	.0103791
havmilsq	-8.46e-06	.0000154	-0.55	0.582	-.0000386	.0000217
_cons	6.917383	1030.768	0.01	0.995	-2013.35	2027.185

Note: 3 failures and 0 successes completely determined.

Logistic model for HP2probsoc

	True		
Classified	D	~D	Total
+	53	11	64
-	20	269	289
Total	73	280	353

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	72.60%
Specificity	Pr(-|~D)	96.07%
Positive predictive value	Pr(D| +)	82.81%
Negative predictive value	Pr(~D| -)	93.08%
False + rate for true ~D	Pr(+|~D)	3.93%
False - rate for true D	Pr(-| D)	27.40%
False + rate for classified +	Pr(~D| +)	17.19%
False - rate for classified -	Pr(D| -)	6.92%
Correctly classified		91.22%

Logistic model for HP2probsoc, goodness-of-fit test

```
      number of observations =       353
number of covariate patterns =       353
           Pearson chi2(308) =       419.21
                 Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2probsoc**

Log-Lik Intercept Only:	**-179.919**	Log-Lik Full Model:	**-93.199**
D(304):	**186.398**	LR(44):	**173.440**
		Prob > LR:	**0.000**
McFadden's R2:	**0.482**	McFadden's Adj R2:	**0.210**
Maximum Likelihood R2:	**0.388**	Cragg & Uhler's R2:	**0.607**
McKelvey and Zavoina's R2:	**0.892**	Efron's R2:	**0.528**
Variance of y*:	**30.526**	Variance of error:	**3.290**
Count R2:	**0.912**	Adj Count R2:	**0.575**
AIC:	**0.806**	AIC*n:	**284.398**
BIC:	**-1597.009**	BIC':	**84.685**

Full main model for HP2pbfhm for wave= 2

---

chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2probsoc

Full Nottingham Part 2 HP2pbfhm subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_2 != 0 predicts failure perfectly
      _Ieduc_2 dropped and 10 obs not used

note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ5w2 != 0 predicts failure perfectly
      occ5w2 dropped and 17 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used
```

```
note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used

note: inc1w2 != 0 predicts failure perfectly
      inc1w2 dropped and 13 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 2 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        201
                                                  LR chi2(32)     =      57.01
                                                  Prob > chi2     =     0.0042
Log likelihood = -38.789787                       Pseudo R2       =     0.4236

------------------------------------------------------------------------------
     HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          age |   .0838902   .0451044     1.86   0.063    -.0045127    .1722932
     _Ieduc_2 |          0  (omitted)
     _Ieduc_3 |  -1.068513   .9797271    -1.09   0.275    -2.988743     .851717
     _Ieduc_4 |          0  (omitted)
     _Ieduc_5 |  -.7464993    1.30613    -0.57   0.568    -3.306468    1.813469
     _Ieduc_6 |          0  (omitted)
     _Ieduc_7 |          0  (omitted)
     _Ieduc_8 |          0  (omitted)
       occ1w2 |   1.365472   9.739165     0.14   0.888    -17.72294    20.45389
       occ2w2 |   .1388058   9.737518     0.01   0.989    -18.94638    19.22399
       occ3w2 |    1.99317   9.743118     0.20   0.838    -17.10299    21.08933
       occ4w2 |   2.351827   9.813506     0.24   0.811    -16.88229    21.58595
       occ5w2 |          0  (omitted)
       occ6w2 |          0  (omitted)
       occ7w2 |   .8526169   9.853293     0.09   0.931    -18.45948    20.16472
       occ8w2 |          0  (omitted)
      marrw21 |   9.450183   1628.316     0.01   0.995     -3181.99    3200.891
      marrw22 |          0  (omitted)
      marrw23 |   8.041239   1628.316     0.00   0.996      -3183.4    3199.482
      marrw25 |          0  (omitted)
```

marrw26	0	(omitted)				
inc1w2	0	(omitted)				
inc2w2	-.2472615	9.778068	-0.03	0.980	-19.41192	18.9174
inc3w2	.4803685	9.779356	0.05	0.961	-18.68682	19.64755
inc4w2	0	(omitted)				
radhlw2	.0219991	.0174949	1.26	0.209	-.0122902	.0562884
havmil	-.0118024	.0110278	-1.07	0.285	-.0334164	.0098117
avgcumdosew2	-.108206	.7718766	-0.14	0.889	-1.621056	1.404644
bf1	-.0239769	.0247822	-0.97	0.333	-.0725492	.0245953
bf4	-.1619124	.088191	-1.84	0.066	-.3347635	.0109388
bf6	.0726065	.0265235	2.74	0.006	.0206214	.1245916
bf7	.5947613	.2273662	2.62	0.009	.1491317	1.040391
bf14	-.0000762	.0001284	-0.59	0.553	-.0003279	.0001756
bf15	0	(omitted)				
bf40	.1113503	.2734738	0.41	0.684	-.4246485	.6473491
deaw2	.5485131	.536457	1.02	0.307	-.5029234	1.59995
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	.185387	1.066161	0.17	0.862	-1.904251	2.275025
movew2	-.6539417	1.506102	-0.43	0.664	-3.605848	2.297965
illw2	1.606215	.6542566	2.46	0.014	.3238954	2.888534
shfamw2	-.0092438	.0132973	-0.70	0.487	-.0353061	.0168184
shhlw2	-.031707	.0186076	-1.70	0.088	-.0681771	.0047632
shjobw2	.0258976	.0158492	1.63	0.102	-.0051662	.0569614
shrelaw2	-.0153159	.0142321	-1.08	0.282	-.0432103	.0125785
suprtw2	-.0315277	.0143652	-2.19	0.028	-.059683	-.0033724
suchrw2	.0165746	.0112144	1.48	0.139	-.0054051	.0385544
havmilsq	.0000128	.0000121	1.06	0.291	-.000011	.0000367
_cons	-18.46331	1628.32	-0.01	0.991	-3209.912	3172.985

Logistic model for HP2pbfhm

	True		
Classified	D	~D	Total
+	6	2	8
-	15	178	193
Total	21	180	201

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   28.57%
Specificity                     Pr( -|~D)   98.89%
Positive predictive value       Pr( D| +)   75.00%
Negative predictive value       Pr(~D| -)   92.23%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    1.11%
False - rate for true D         Pr( -| D)   71.43%
False + rate for classified +   Pr(~D| +)   25.00%
False - rate for classified -   Pr( D| -)    7.77%
--------------------------------------------------
Correctly classified                        91.54%
--------------------------------------------------
```

Logistic model for HP2pbfhm, goodness-of-fit test

```
       number of observations =       201
 number of covariate patterns =       201
             Pearson chi2(168) =        94.58
                   Prob > chi2 =        1.0000
```

Measures of Fit for **logit** of **HP2pbfhm**

```
Log-Lik Intercept Only:      -67.297    Log-Lik Full Model:            -38.790
D(152):                       77.580    LR(32):                         57.015
                                        Prob > LR:                       0.004
McFadden's R2:                 0.424    McFadden's Adj R2:              -0.305
Maximum Likelihood R2:         0.247    Cragg & Uhler's R2:              0.506
McKelvey and Zavoina's R2:     0.804    Efron's R2:                      0.348
Variance of y*:               16.822    Variance of error:               3.290
Count R2:                      0.915    Adj Count R2:                    0.190
AIC:                           0.874    AIC*n:                         175.580
BIC:                        -728.523    BIC':                          112.691
```

Full main model for HP2pbfhm for wave= 2

chunk 2 H1 test:Gender= 2 model Wave = 2 for HP2pbfhm

Full Nottingham Part 2 HP2pbfhm subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
```

```
note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 9 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 8 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 6 obs not used

note: movew2 != 0 predicts failure perfectly
      movew2 dropped and 39 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
convergence not achieved

Logistic regression                               Number of obs   =        291
                                                  LR chi2(39)     =     121.44
                                                  Prob > chi2     =     0.0000
Log likelihood = -67.949794                       Pseudo R2       =     0.4719
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0674178	.0282025	2.39	0.017	.0121418	.1226937
_Ieduc_2	22.45919	4.266606	5.26	0.000	14.0968	30.82159
_Ieduc_3	22.06002	4.192694	5.26	0.000	13.84249	30.27755
_Ieduc_4	22.4012	4.329045	5.17	0.000	13.91643	30.88597
_Ieduc_5	22.32897	4.266196	5.23	0.000	13.96738	30.69056
_Ieduc_6	22.02903	4.204125	5.24	0.000	13.7891	30.26897
_Ieduc_7	21.13032	.	.	.	.	.
_Ieduc_8	0	(omitted)				
occ1w2	.9558639	2.824765	0.34	0.735	-4.580574	6.492302
occ2w2	-1.993618	3.01079	-0.66	0.508	-7.894658	3.907421
occ3w2	1.403833	2.850675	0.49	0.622	-4.183387	6.991053
occ4w2	-1.259009	3.02978	-0.42	0.678	-7.197269	4.679252
occ5w2	2.718272	3.09293	0.88	0.379	-3.343759	8.780304
occ6w2	0	(omitted)				
occ7w2	2.384262	2.790736	0.85	0.393	-3.08548	7.854004
occ8w2	1.770943	3.166948	0.56	0.576	-4.436161	7.978046
marrw21	1.861273	1.561449	1.19	0.233	-1.199112	4.921657
marrw22	0	(omitted)				
marrw23	1.290339	1.071559	1.20	0.229	-.8098785	3.390556
marrw25	1.772428	1.596788	1.11	0.267	-1.357219	4.902075
marrw26	0	(omitted)				

inc1w2	-1.33359	2.871884	-0.46	0.642	-6.962379	4.295198
inc2w2	.7173212	2.783801	0.26	0.797	-4.738828	6.17347
inc3w2	.3992103	2.823016	0.14	0.888	-5.133799	5.932219
inc4w2	0	(omitted)				
radhlw2	.0119324	.0102799	1.16	0.246	-.0082157	.0320806
havmil	-.0039166	.0172766	-0.23	0.821	-.0377782	.0299449
avgcumdosew2	.2705886	.2224323	1.22	0.224	-.1653708	.7065479
bf1	-.0266454	.0134122	-1.99	0.047	-.0529327	-.000358
bf4	-.3552675	.0755758	-4.70	0.000	-.5033934	-.2071416
bf6	.0040579	.0115049	0.35	0.724	-.0184912	.026607
bf7	-.0875054	.1502842	-0.58	0.560	-.382057	.2070462
bf14	-.0003758	.000148	-2.54	0.011	-.0006658	-.0000858
bf15	0	(omitted)				
bf40	-.3371788	.1421157	-2.37	0.018	-.6157205	-.0586371
deaw2	-.0553518	.2550262	-0.22	0.828	-.555194	.4444904
dvcew2	-1.208217	2.005762	-0.60	0.547	-5.139437	2.723004
sepaw2	0	(omitted)				
accdw2	-2.803857	1.396614	-2.01	0.045	-5.541171	-.0665435
movew2	0	(omitted)				
illw2	.0638975	.2821958	0.23	0.821	-.4891961	.616991
shfamw2	.0165867	.0090719	1.83	0.067	-.0011938	.0343673
shhlw2	.0127277	.0099957	1.27	0.203	-.0068635	.0323189
shjobw2	-.0073696	.0092032	-0.80	0.423	-.0254077	.0106684
shrelaw2	-.0222356	.0112808	-1.97	0.049	-.0443455	-.0001257
suprtw2	-.0212928	.0081756	-2.60	0.009	-.0373168	-.0052689
suchrw2	-.0010117	.0080736	-0.13	0.900	-.0168358	.0148123
havmilsq	-6.45e-06	.0000545	-0.12	0.906	-.0001132	.0001003
_cons	-23.96724	5.098279	-4.70	0.000	-33.95968	-13.97479

Note: 2 failures and 0 successes completely determined.
Warning: convergence not achieved

Logistic model for HP2pbfhm

	True		
Classified	D	~D	Total
+	27	8	35
-	20	236	256
Total	47	244	291

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   57.45%
Specificity                     Pr( -|~D)   96.72%
Positive predictive value       Pr( D| +)   77.14%
Negative predictive value       Pr(~D| -)   92.19%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    3.28%
False - rate for true D         Pr( -| D)   42.55%
False + rate for classified +   Pr(~D| +)   22.86%
False - rate for classified -   Pr( D| -)    7.81%
--------------------------------------------------
Correctly classified                        90.38%
--------------------------------------------------
```

Logistic model for HP2pbfhm, goodness-of-fit test

```
       number of observations =       291
 number of covariate patterns =       291
            Pearson chi2(250) =       229.67
                  Prob > chi2 =         0.8173
```

Measures of Fit for **logit** of **HP2pbfhm**

```
Log-Lik Intercept Only:     -128.671    Log-Lik Full Model:            -67.950
D(242):                      135.900    LR(39):                        121.443
                                        Prob > LR:                       0.000
McFadden's R2:                 0.472    McFadden's Adj R2:               0.091
Maximum Likelihood R2:         0.341    Cragg & Uhler's R2:              0.581
McKelvey and Zavoina's R2:     0.820    Efron's R2:                      0.487
Variance of y*:               18.247    Variance of error:               3.290
Count R2:                      0.904    Adj Count R2:                    0.404
AIC:                           0.804    AIC*n:                         233.900
BIC:                       -1237.045    BIC':                           99.817
```

Full main model for HP2sxlife for wave= 2

chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2pbfhm

Full Nottingham Part 2 HP2sxlife subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
```

```
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 8 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_8 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        248
                                                  LR chi2(38)     =     124.45
                                                  Prob > chi2     =     0.0000
Log likelihood = -81.459667                       Pseudo R2       =     0.4331
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.045416	.0245513	1.85	0.064	-.0027037	.0935357
_Ieduc_2	-.0646877	2.529828	-0.03	0.980	-5.02306	4.893684
_Ieduc_3	-.2043117	2.425172	-0.08	0.933	-4.957562	4.548938
_Ieduc_4	0	(omitted)				
_Ieduc_5	.5468814	2.47638	0.22	0.825	-4.306734	5.400497
_Ieduc_6	-.5396204	2.395021	-0.23	0.822	-5.233776	4.154535
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-.914781	4.041769	-0.23	0.821	-8.836503	7.006941
occ2w2	-1.085289	4.050896	-0.27	0.789	-9.024899	6.854322
occ3w2	-2.01676	4.099586	-0.49	0.623	-10.0518	6.018282
occ4w2	-1.281739	4.07837	-0.31	0.753	-9.275197	6.711719
occ5w2	-2.386463	4.187943	-0.57	0.569	-10.59468	5.821754
occ6w2	1.041656	4.356584	0.24	0.811	-7.497091	9.580403

occ7w2	-.2042994	4.128602	-0.05	0.961	-8.296212	7.887613
occ8w2	0	(omitted)				
marrw21	11.19923	1268.681	0.01	0.993	-2475.369	2497.767
marrw22	0	(omitted)				
marrw23	11.00787	1268.681	0.01	0.993	-2475.56	2497.576
marrw25	0	(omitted)				
marrw26	9.989133	1268.682	0.01	0.994	-2476.582	2496.56
inc1w2	2.592204	4.16321	0.62	0.534	-5.567537	10.75195
inc2w2	3.029964	4.086266	0.74	0.458	-4.978969	11.0389
inc3w2	2.803138	4.089233	0.69	0.493	-5.211611	10.81789
inc4w2	0	(omitted)				
radhlw2	.0158792	.0090915	1.75	0.081	-.0019397	.0336982
havmil	-.0002765	.0085069	-0.03	0.974	-.0169497	.0163966
avgcumdosew2	-.0370642	.0826057	-0.45	0.654	-.1989685	.1248401
bf1	.0019651	.0129727	0.15	0.880	-.0234608	.0273911
bf4	-.2487796	.05911	-4.21	0.000	-.3646331	-.1329261
bf6	.0163867	.0108586	1.51	0.131	-.0048957	.0376692
bf7	.0671464	.105745	0.63	0.525	-.1401099	.2744028
bf14	-.0000488	.0000798	-0.61	0.541	-.0002053	.0001076
bf15	0	(omitted)				
bf40	.3417099	.1521463	2.25	0.025	.0435086	.6399112
deaw2	.0342021	.3561465	0.10	0.923	-.6638321	.7322364
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	-.0684013	.5282538	-0.13	0.897	-1.10376	.9669571
movew2	.1688384	.5667796	0.30	0.766	-.9420292	1.279706
illw2	.2358444	.3235455	0.73	0.466	-.398293	.8699819
shfamw2	-.0126799	.0083767	-1.51	0.130	-.0290979	.0037381
shhlw2	-.01343	.0100141	-1.34	0.180	-.0330573	.0061973
shjobw2	.0172317	.0096379	1.79	0.074	-.0016582	.0361216
shrelaw2	-.0093206	.0085022	-1.10	0.273	-.0259847	.0073434
suprtw2	.0077123	.0077451	1.00	0.319	-.0074679	.0228925
suchrw2	.0029045	.0070402	0.41	0.680	-.0108941	.016703
havmilsq	-1.32e-06	.0000139	-0.10	0.924	-.0000286	.0000259
_cons	-16.32451	1268.684	-0.01	0.990	-2502.9	2470.251

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	47	15	62
-	19	167	186
Total	66	182	248

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   71.21%
Specificity                     Pr( -|~D)   91.76%
Positive predictive value       Pr( D| +)   75.81%
Negative predictive value       Pr(~D| -)   89.78%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    8.24%
False - rate for true D         Pr( -| D)   28.79%
False + rate for classified +   Pr(~D| +)   24.19%
False - rate for classified -   Pr( D| -)   10.22%
--------------------------------------------------
Correctly classified                        86.29%
--------------------------------------------------
```

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       248
 number of covariate patterns =       248
            Pearson chi2(209) =       320.07
                  Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2sxlife**

```
Log-Lik Intercept Only:     -143.684    Log-Lik Full Model:            -81.460
D(199):                      162.919    LR(38):                        124.448
                                        Prob > LR:                       0.000
McFadden's R2:                 0.433    McFadden's Adj R2:               0.092
Maximum Likelihood R2:         0.395    Cragg & Uhler's R2:              0.575
McKelvey and Zavoina's R2:     0.701    Efron's R2:                      0.489
Variance of y*:               11.005    Variance of error:               3.290
Count R2:                      0.863    Adj Count R2:                    0.485
AIC:                           1.052    AIC*n:                         260.919
BIC:                        -934.253    BIC':                           85.062
```

Full main model for HP2sxlife for wave= 2

chunk 2 H1 test:Gender= 2 model Wave = 2 for HP2sxlife

Full Nottingham Part 2 HP2sxlife subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
```

```
note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        362
                                                  LR chi2(45)     =     172.53
                                                  Prob > chi2     =     0.0000
Log likelihood = -119.99963                       Pseudo R2       =     0.4182
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0946676	.020348	4.65	0.000	.0547862	.1345489
_Ieduc_2	-12.06916	856.9725	-0.01	0.989	-1691.704	1667.566
_Ieduc_3	-10.96566	856.9724	-0.01	0.990	-1690.601	1668.669
_Ieduc_4	-10.2721	856.9727	-0.01	0.990	-1689.908	1669.364
_Ieduc_5	-11.78295	856.9726	-0.01	0.989	-1691.418	1667.853
_Ieduc_6	-10.87488	856.9725	-0.01	0.990	-1690.51	1668.76
_Ieduc_7	-10.54712	856.9809	-0.01	0.990	-1690.199	1669.105
_Ieduc_8	0	(omitted)				
occ1w2	-1.924676	1.67129	-1.15	0.249	-5.200344	1.350992
occ2w2	-1.071334	1.695639	-0.63	0.528	-4.394725	2.252058
occ3w2	-.4988122	1.696518	-0.29	0.769	-3.823926	2.826301
occ4w2	-.6837643	1.779367	-0.38	0.701	-4.171259	2.803731
occ5w2	-.8653809	1.874647	-0.46	0.644	-4.539621	2.80886
occ6w2	-1.70777	1.969995	-0.87	0.386	-5.568889	2.153348
occ7w2	-.9209399	1.641247	-0.56	0.575	-4.137725	2.295845
occ8w2	-.5235734	1.936624	-0.27	0.787	-4.319287	3.272141
marrw21	-.4474367	1.15873	-0.39	0.699	-2.718505	1.823632
marrw22	-.2713813	1.430959	-0.19	0.850	-3.07601	2.533247
marrw23	-.6859987	.8247327	-0.83	0.406	-2.302445	.9304478
marrw25	-1.534831	1.287976	-1.19	0.233	-4.059218	.9895558
marrw26	0	(omitted)				
inc1w2	.1793057	1.714781	0.10	0.917	-3.181602	3.540214
inc2w2	.5322943	1.648367	0.32	0.747	-2.698446	3.763035
inc3w2	-.4148838	1.696991	-0.24	0.807	-3.740924	2.911157
inc4w2	-.3610821	2.088477	-0.17	0.863	-4.454421	3.732257
radhlw2	.0084415	.0066869	1.26	0.207	-.0046645	.0215475
havmil	-.0012719	.0033206	-0.38	0.702	-.0077802	.0052364
avgcumdosew2	.131101	.1238204	1.06	0.290	-.1115826	.3737846
bf1	-.0011966	.0090476	-0.13	0.895	-.0189295	.0165364
bf4	-.1626538	.0410542	-3.96	0.000	-.2431185	-.0821891
bf6	-.0040259	.0075131	-0.54	0.592	-.0187513	.0106995
bf7	-.07395	.0811067	-0.91	0.362	-.2329163	.0850162
bf14	-.000028	.0000759	-0.37	0.712	-.0001769	.0001208
bf15	0	(omitted)				
bf40	.0142117	.0784184	0.18	0.856	-.1394855	.1679089
deaw2	.0365782	.2150994	0.17	0.865	-.3850089	.4581654
dvcew2	-.8025004	1.585115	-0.51	0.613	-3.909268	2.304268

sepaw2	-.5574826	2.582905	-0.22	0.829	-5.619883	4.504918
accdw2	-.5477504	.6503834	-0.84	0.400	-1.822478	.7269777
movew2	.1966685	.5120534	0.38	0.701	-.8069378	1.200275
illw2	.5493357	.2439985	2.25	0.024	.0711074	1.027564
shfamw2	.0017721	.0066016	0.27	0.788	-.0111667	.0147109
shhlw2	.0069859	.006691	1.04	0.296	-.0061281	.0201
shjobw2	-.0075261	.0063225	-1.19	0.234	-.019918	.0048658
shrelaw2	-.0137558	.0073868	-1.86	0.063	-.0282337	.000722
suprtw2	-.0141433	.0055222	-2.56	0.010	-.0249667	-.0033199
suchrw2	.0162332	.0063006	2.58	0.010	.0038842	.0285821
havmilsq	-1.92e-07	2.92e-06	-0.07	0.948	-5.91e-06	5.53e-06
_cons	7.796544	856.9744	0.01	0.993	-1671.842	1687.436

Logistic model for HP2sxlife

	True		
Classified	D	~D	Total
+	59	19	78
-	34	250	284
Total	93	269	362

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	63.44%
Specificity	Pr(-|~D)	92.94%
Positive predictive value	Pr(D| +)	75.64%
Negative predictive value	Pr(~D| -)	88.03%
False + rate for true ~D	Pr(+|~D)	7.06%
False - rate for true D	Pr(-| D)	36.56%
False + rate for classified +	Pr(~D| +)	24.36%
False - rate for classified -	Pr(D| -)	11.97%
Correctly classified		85.36%

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       362
 number of covariate patterns =       362
             Pearson chi2(316) =       350.60
                   Prob > chi2 =         0.0877
```

Measures of Fit for **logit** of **HP2sxlife**

```
Log-Lik Intercept Only:     -206.266   Log-Lik Full Model:         -120.000
D(313):                      239.999   LR(45):                      172.533
                                       Prob > LR:                     0.000
McFadden's R2:                 0.418   McFadden's Adj R2:             0.181
Maximum Likelihood R2:         0.379   Cragg & Uhler's R2:            0.557
McKelvey and Zavoina's R2:     0.643   Efron's R2:                    0.461
Variance of y*:                9.209   Variance of error:             3.290
Count R2:                      0.854   Adj Count R2:                  0.430
AIC:                           0.934   AIC*n:                       337.999
BIC:                       -1604.085   BIC':                         92.591
```

Full main model for HP2inthob for wave= 2

---

chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2sxlife

Full Nottingham Part 2 HP2inthob subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used
```

```
note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        240
                                                  LR chi2(35)     =      92.50
                                                  Prob > chi2     =     0.0000
Log likelihood = -55.199011                       Pseudo R2       =     0.4559
```

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0625698	.0339541	1.84	0.065	-.0039791	.1291186
_Ieduc_2	-1.043358	1.579537	-0.66	0.509	-4.139194	2.052478
_Ieduc_3	-1.383026	.8161024	-1.69	0.090	-2.982558	.216505
_Ieduc_4	0	(omitted)				
_Ieduc_5	-.3882601	.890757	-0.44	0.663	-2.134112	1.357591
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-1.033982	5.222537	-0.20	0.843	-11.26997	9.202003
occ2w2	-2.764859	5.282979	-0.52	0.601	-13.11931	7.58959
occ3w2	-1.159373	5.266774	-0.22	0.826	-11.48206	9.163314
occ4w2	-1.475817	5.272908	-0.28	0.780	-11.81053	8.858893
occ5w2	.6777917	5.260041	0.13	0.897	-9.631698	10.98728
occ6w2	0	(omitted)				
occ7w2	-.3442089	5.327123	-0.06	0.948	-10.78518	10.09676
occ8w2	0	(omitted)				
marrw21	13.93224	1621.282	0.01	0.993	-3163.721	3191.586
marrw22	0	(omitted)				
marrw23	11.47436	1621.282	0.01	0.994	-3166.179	3189.128
marrw25	0	(omitted)				
marrw26	0	(omitted)				
inc1w2	-2.09725	5.429773	-0.39	0.699	-12.73941	8.544909
inc2w2	-.9256519	5.257192	-0.18	0.860	-11.22956	9.378255
inc3w2	.0745765	5.245026	0.01	0.989	-10.20548	10.35464
inc4w2	0	(omitted)				
radhlw2	.0364231	.0131057	2.78	0.005	.0107363	.0621099
havmil	.0020332	.0091412	0.22	0.824	-.0158833	.0199497
avgcumdosew2	-.2023055	.3376483	-0.60	0.549	-.8640841	.4594731
bf1	.0108557	.0182727	0.59	0.552	-.0249582	.0466696

bf4	-.290932	.0816796	-3.56	0.000	-.4510211	-.1308428
bf6	.0111353	.0131635	0.85	0.398	-.0146647	.0369353
bf7	.0337038	.1171208	0.29	0.774	-.1958487	.2632562
bf14	-.000219	.0001127	-1.94	0.052	-.0004398	1.92e-06
bf15	0	(omitted)				
bf40	.490857	.2032201	2.42	0.016	.0925529	.889161
deaw2	.006222	.5178905	0.01	0.990	-1.008825	1.021269
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	1.036869	.5663339	1.83	0.067	-.0731249	2.146863
movew2	.7948452	.8450104	0.94	0.347	-.8613447	2.451035
illw2	-.8262786	.5178561	-1.60	0.111	-1.841258	.1887007
shfamw2	-.003778	.0101348	-0.37	0.709	-.0236419	.0160858
shhlw2	-.0014472	.0125099	-0.12	0.908	-.0259662	.0230717
shjobw2	.0044446	.012101	0.37	0.713	-.0192728	.0281621
shrelaw2	-.0158848	.0098629	-1.61	0.107	-.0352157	.0034461
suprtw2	-.0048211	.0089741	-0.54	0.591	-.0224099	.0127678
suchrw2	.016543	.008867	1.87	0.062	-.0008361	.033922
havmilsq	-2.84e-06	.0000159	-0.18	0.858	-.000034	.0000283
_cons	-16.47971	1621.283	-0.01	0.992	-3194.136	3161.177

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2inthob

Classified	True D	True ~D	Total
+	20	6	26
-	16	198	214
Total	36	204	240

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	55.56%
Specificity	Pr(-|~D)	97.06%
Positive predictive value	Pr(D| +)	76.92%
Negative predictive value	Pr(~D| -)	92.52%
False + rate for true ~D	Pr(+|~D)	2.94%
False - rate for true D	Pr(-| D)	44.44%
False + rate for classified +	Pr(~D| +)	23.08%
False - rate for classified -	Pr(D| -)	7.48%
Correctly classified		90.83%

Logistic model for HP2inthob, goodness-of-fit test

```
       number of observations =       240
 number of covariate patterns =       240
            Pearson chi2(204) =       545.84
                  Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2inthob**

Log-Lik Intercept Only:	-101.450	Log-Lik Full Model:	-55.199
D(191):	110.398	LR(35):	92.502
		Prob > LR:	0.000
McFadden's R2:	0.456	McFadden's Adj R2:	-0.027
Maximum Likelihood R2:	0.320	Cragg & Uhler's R2:	0.561
McKelvey and Zavoina's R2:	0.776	Efron's R2:	0.482
Variance of y*:	14.694	Variance of error:	3.290
Count R2:	0.908	Adj Count R2:	0.389
AIC:	0.868	AIC*n:	208.398
BIC:	-936.404	BIC':	99.320

Full main model for HP2inthob for wave= 2

chunk 2 H1 test:Gender= 2 model Wave = 2 for HP2inthob

Full Nottingham Part 2 HP2inthob subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 8 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        354
                                                  LR chi2(44)     =     115.47
                                                  Prob > chi2     =     0.0000
Log likelihood = -111.06431                       Pseudo R2       =     0.3420
```

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.079863	.021131	3.78	0.000	.0384469	.121279
_Ieduc_2	-12.93831	1490.754	-0.01	0.993	-2934.762	2908.885
_Ieduc_3	-12.4076	1490.754	-0.01	0.993	-2934.231	2909.416
_Ieduc_4	-11.72169	1490.754	-0.01	0.994	-2933.546	2910.102
_Ieduc_5	-12.09518	1490.754	-0.01	0.994	-2933.919	2909.728
_Ieduc_6	-12.44516	1490.754	-0.01	0.993	-2934.269	2909.378
_Ieduc_7	-12.06531	1490.757	-0.01	0.994	-2933.895	2909.764
_Ieduc_8	0	(omitted)				
occ1w2	-1.681778	1.842381	-0.91	0.361	-5.292779	1.929222
occ2w2	-2.066763	1.905083	-1.08	0.278	-5.800657	1.66713
occ3w2	-.925484	1.867622	-0.50	0.620	-4.585956	2.734988
occ4w2	-1.837685	1.997812	-0.92	0.358	-5.753324	2.077954
occ5w2	-1.808015	2.160492	-0.84	0.403	-6.042501	2.426471
occ6w2	-.7980572	2.0458	-0.39	0.696	-4.807751	3.211637
occ7w2	-.6513668	1.8133	-0.36	0.719	-4.205369	2.902636
occ8w2	-.7497523	2.02704	-0.37	0.711	-4.722678	3.223174
marrw21	1.330155	1.130799	1.18	0.239	-.8861701	3.546479
marrw22	.1433998	1.421047	0.10	0.920	-2.641801	2.9286
marrw23	.3124211	.8029396	0.39	0.697	-1.261312	1.886154
marrw25	.2321157	1.213839	0.19	0.848	-2.146964	2.611196
marrw26	0	(omitted)				
inc1w2	1.002608	1.857433	0.54	0.589	-2.637893	4.643109
inc2w2	1.21648	1.809887	0.67	0.502	-2.330833	4.763793
inc3w2	.8716928	1.845137	0.47	0.637	-2.744709	4.488095
inc4w2	2.25991	2.119136	1.07	0.286	-1.893519	6.41334
radhlw2	.0169047	.0075432	2.24	0.025	.0021202	.0316892
havmil	.0026206	.00401	0.65	0.513	-.0052388	.0104801
avgcumdosew2	.1098391	.1075167	1.02	0.307	-.1008897	.3205679
bf1	-.0101735	.0098443	-1.03	0.301	-.029468	.0091209
bf4	-.160166	.0433489	-3.69	0.000	-.2451282	-.0752038
bf6	-.0029228	.0086097	-0.34	0.734	-.0197974	.0139519
bf7	-.0201783	.0882604	-0.23	0.819	-.1931656	.152809
bf14	-.0000789	.0000837	-0.94	0.346	-.000243	.0000853
bf15	0	(omitted)				
bf40	-.0387073	.0922777	-0.42	0.675	-.2195682	.1421537
deaw2	.1202612	.2113024	0.57	0.569	-.2938838	.5344063
dvcew2	.0143372	1.477099	0.01	0.992	-2.880724	2.909399
sepaw2	0	(omitted)				
accdw2	.4772298	.6036102	0.79	0.429	-.7058243	1.660284
movew2	-.5141092	.7928535	-0.65	0.517	-2.068073	1.039855
illw2	.1586699	.2249295	0.71	0.481	-.2821838	.5995235
shfamw2	-.0005225	.0071722	-0.07	0.942	-.0145799	.0135348
shhlw2	.0069143	.0072142	0.96	0.338	-.0072252	.0210539
shjobw2	-.0096031	.0066833	-1.44	0.151	-.0227021	.003496
shrelaw2	-.011349	.0077316	-1.47	0.142	-.0265027	.0038047
suprtw2	-.01257	.0057932	-2.17	0.030	-.0239246	-.0012155

suchrw2	.000171	.0063873	0.03	0.979	-.0123478	.0126898
havmilsq	-2.75e-06	5.84e-06	-0.47	0.638	-.0000142	8.69e-06
_cons	8.21905	1490.755	0.01	0.996	-2913.607	2930.045

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	35	12	47
-	30	277	307
Total	65	289	354

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	53.85%
Specificity	Pr(-|~D)	95.85%
Positive predictive value	Pr(D| +)	74.47%
Negative predictive value	Pr(~D| -)	90.23%
False + rate for true ~D	Pr(+|~D)	4.15%
False - rate for true D	Pr(-| D)	46.15%
False + rate for classified +	Pr(~D| +)	25.53%
False - rate for classified -	Pr(D| -)	9.77%
Correctly classified		88.14%

Logistic model for HP2inthob, goodness-of-fit test

```
      number of observations =       354
number of covariate patterns =       354
           Pearson chi2(309) =       384.69
                 Prob > chi2 =         0.0022
```

Measures of Fit for **logit** of **HP2inthob**

```
Log-Lik Intercept Only:      -168.799    Log-Lik Full Model:          -111.064
D(305):                       222.129    LR(44):                       115.469
                                         Prob > LR:                      0.000
McFadden's R2:                  0.342    McFadden's Adj R2:              0.052
Maximum Likelihood R2:          0.278    Cragg & Uhler's R2:             0.453
McKelvey and Zavoina's R2:      0.619    Efron's R2:                     0.372
Variance of y*:                 8.629    Variance of error:              3.290
Count R2:                       0.881    Adj Count R2:                   0.354
AIC:                            0.904    AIC*n:                        320.129
BIC:                        -1568.007    BIC':                         142.780
```

Full main model for HP2vacatn for wave= 2

---

chunk 2 H1 test:Gender= 1 model Wave = 2 for HP2inthob

Full Nottingham Part 2 HP2vacatn subscale models

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used

note: inc1w2 != 0 predicts failure perfectly
      inc1w2 dropped and 15 obs not used
```

```
note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 10 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 3 obs not used

note: marrw25 != 0 predicts success perfectly
      marrw25 dropped and 1 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 2 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        226
                                                  LR chi2(34)     =      89.37
                                                  Prob > chi2     =     0.0000
Log likelihood = -56.061123                       Pseudo R2       =     0.4435
```

HP2vacatn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0518481	.0320007	1.62	0.105	-.0108721	.1145682
_Ieduc_2	-.8995561	1.385138	-0.65	0.516	-3.614377	1.815265
_Ieduc_3	-.9705268	.7645926	-1.27	0.204	-2.469101	.5280471
_Ieduc_4	0	(omitted)				
_Ieduc_5	.2832276	.9129115	0.31	0.756	-1.506046	2.072501
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	.8106927	4.39778	0.18	0.854	-7.808798	9.430184
occ2w2	.6920438	4.410202	0.16	0.875	-7.951794	9.335881
occ3w2	.1305127	4.486304	0.03	0.977	-8.662482	8.923507
occ4w2	.89698	4.456507	0.20	0.840	-7.837613	9.631573
occ5w2	2.521801	4.487812	0.56	0.574	-6.274149	11.31775
occ6w2	0	(omitted)				
occ7w2	-.3588464	4.557173	-0.08	0.937	-9.290741	8.573048
occ8w2	0	(omitted)				
marrw21	-2.421712	1.8269	-1.33	0.185	-6.002369	1.158946
marrw22	0	(omitted)				
marrw23	-3.630848	1.854766	-1.96	0.050	-7.266123	.0044279
marrw25	0	(omitted)				
marrw26	0	(omitted)				
inc1w2	0	(omitted)				
inc2w2	1.85842	4.404089	0.42	0.673	-6.773436	10.49027
inc3w2	2.742231	4.406664	0.62	0.534	-5.894672	11.37913
inc4w2	0	(omitted)				
radhlw2	.0040453	.0113057	0.36	0.720	-.0181135	.0262041

havmil	.0057124	.0149305	0.38	0.702	-.0235508	.0349756
avgcumdosew2	-.2290056	.2971244	-0.77	0.441	-.8113587	.3533474
bf1	-.0014462	.0165487	-0.09	0.930	-.0338809	.0309886
bf4	-.3542988	.0849763	-4.17	0.000	-.5208492	-.1877483
bf6	.0330318	.0142347	2.32	0.020	.0051324	.0609312
bf7	.138525	.1284222	1.08	0.281	-.1131778	.3902278
bf14	-.0001823	.0001057	-1.72	0.085	-.0003895	.0000249
bf15	0	(omitted)				
bf40	.7151656	.2261712	3.16	0.002	.2718781	1.158453
deaw2	-.1293481	.4547459	-0.28	0.776	-1.020634	.7619374
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	.6561002	.566831	1.16	0.247	-.4548681	1.767069
movew2	.8988969	.8083424	1.11	0.266	-.6854251	2.483219
illw2	-.1907347	.4011558	-0.48	0.634	-.9769857	.5955162
shfamw2	.0075499	.0104385	0.72	0.470	-.0129092	.0280089
shhlw2	-.0086364	.01369	-0.63	0.528	-.0354682	.0181955
shjobw2	-.0142832	.0135576	-1.05	0.292	-.0408556	.0122892
shrelaw2	-.0233172	.0117345	-1.99	0.047	-.0463164	-.000318
suprtw2	.0076256	.010193	0.75	0.454	-.0123524	.0276036
suchrw2	-.0031525	.0091098	-0.35	0.729	-.0210073	.0147023
havmilsq	-.00002	.0000344	-0.58	0.560	-.0000874	.0000473
_cons	-2.643954	3.239572	-0.82	0.414	-8.993397	3.70549

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2vacatn

Classified	True D	True ~D	Total
+	23	5	28
-	14	184	198
Total	37	189	226

Classified + if predicted Pr(D) >= .5
True D defined as HP2vacatn != 0

Sensitivity	Pr(+| D)	62.16%
Specificity	Pr(-|~D)	97.35%
Positive predictive value	Pr(D| +)	82.14%
Negative predictive value	Pr(~D| -)	92.93%
False + rate for true ~D	Pr(+|~D)	2.65%
False - rate for true D	Pr(-| D)	37.84%
False + rate for classified +	Pr(~D| +)	17.86%
False - rate for classified -	Pr(D| -)	7.07%

```
Correctly classified                        91.59%
--------------------------------------------------
```

Logistic model for HP2vacatn, goodness-of-fit test

```
       number of observations =       226
 number of covariate patterns =       226
            Pearson chi2(191) =       516.74
                  Prob > chi2 =         0.0000
```

Measures of Fit for **logit** of **HP2vacatn**

```
Log-Lik Intercept Only:     -100.747     Log-Lik Full Model:           -56.061
D(177):                      112.122     LR(34):                        89.371
                                         Prob > LR:                      0.000
McFadden's R2:                 0.444     McFadden's Adj R2:             -0.043
Maximum Likelihood R2:         0.327     Cragg & Uhler's R2:             0.554
McKelvey and Zavoina's R2:     0.764     Efron's R2:                     0.489
Variance of y*:               13.933     Variance of error:              3.290
Count R2:                      0.916     Adj Count R2:                   0.486
AIC:                           0.930     AIC*n:                        210.122
BIC:                        -847.312     BIC':                          94.927
```

```
------------------------------------------------------------------------------
Full main model for HP2vacatn for wave= 2
------------------------------------------------------------------------------

------------------------------------------------------------------------------
chunk 2 H1 test:Gender= 2  model Wave =  2 for HP2vacatn
------------------------------------------------------------------------------

------------------------------------------------------------------------------
Full Nottingham Part 2 HP2vacatn subscale models
------------------------------------------------------------------------------
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 8 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        354
                                                  LR chi2(44)     =     111.91
                                                  Prob > chi2     =     0.0000
Log likelihood =  -108.2809                       Pseudo R2       =     0.3407
```

HP2vacatn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0893137	.0216493	4.13	0.000	.0468818	.1317456
_Ieduc_2	-14.53546	998.8236	-0.01	0.988	-1972.194	1943.123
_Ieduc_3	-14.6778	998.8236	-0.01	0.988	-1972.336	1942.981
_Ieduc_4	-12.98634	998.8239	-0.01	0.990	-1970.645	1944.672
_Ieduc_5	-14.15108	998.8238	-0.01	0.989	-1971.81	1943.508
_Ieduc_6	-14.14507	998.8236	-0.01	0.989	-1971.803	1943.513
_Ieduc_7	-14.60252	998.8256	-0.01	0.988	-1972.265	1943.06
_Ieduc_8	0	(omitted)				
occ1w2	-.862164	2.392979	-0.36	0.719	-5.552316	3.827988
occ2w2	.000175	2.407446	0.00	1.000	-4.718332	4.718682
occ3w2	.0954163	2.407091	0.04	0.968	-4.622395	4.813227
occ4w2	-.7520064	2.479333	-0.30	0.762	-5.61141	4.107398
occ5w2	-.8008531	2.678457	-0.30	0.765	-6.050532	4.448826
occ6w2	-.120062	2.547159	-0.05	0.962	-5.112401	4.872278
occ7w2	.0075488	2.349651	0.00	0.997	-4.597682	4.61278
occ8w2	1.363519	2.668018	0.51	0.609	-3.8657	6.592739
marrw21	.0044997	1.254312	0.00	0.997	-2.453907	2.462906
marrw22	-.1027305	1.362298	-0.08	0.940	-2.772785	2.567324
marrw23	.1467459	.8080411	0.18	0.856	-1.436986	1.730477
marrw25	.0219803	1.235341	0.02	0.986	-2.399244	2.443205
marrw26	0	(omitted)				
inc1w2	-.4927145	2.398088	-0.21	0.837	-5.192881	4.207452
inc2w2	.280804	2.359963	0.12	0.905	-4.344638	4.906246
inc3w2	.1828947	2.366651	0.08	0.938	-4.455656	4.821445
inc4w2	-.2400624	2.690874	-0.09	0.929	-5.514079	5.033954
radhlw2	.0222207	.0077189	2.88	0.004	.0070919	.0373496
havmil	.0004923	.0030889	0.16	0.873	-.0055619	.0065465
avgcumdosew2	.0521813	.1224679	0.43	0.670	-.1878514	.2922141
bf1	-.0290072	.0107044	-2.71	0.007	-.0499874	-.0080269
bf4	-.1358474	.0436692	-3.11	0.002	-.2214376	-.0502573
bf6	.0008464	.0089639	0.09	0.925	-.0167225	.0184153
bf7	.091511	.0838763	1.09	0.275	-.0728836	.2559055
bf14	-.0001329	.0000932	-1.43	0.154	-.0003155	.0000496
bf15	0	(omitted)				
bf40	-.088322	.1002957	-0.88	0.379	-.2848979	.1082539
deaw2	.2253226	.214436	1.05	0.293	-.1949642	.6456094
dvcew2	1.943345	1.290529	1.51	0.132	-.5860453	4.472735
sepaw2	0	(omitted)				
accdw2	-.5786213	.7839833	-0.74	0.460	-2.1152	.9579576
movew2	.0523756	.7206426	0.07	0.942	-1.360058	1.464809
illw2	.3527103	.2271102	1.55	0.120	-.0924176	.7978382
shfamw2	.0116122	.0069058	1.68	0.093	-.001923	.0251474
shhlw2	.0049385	.0075176	0.66	0.511	-.0097958	.0196728
shjobw2	-.0062545	.006891	-0.91	0.364	-.0197605	.0072516
shrelaw2	-.0200226	.0083906	-2.39	0.017	-.0364678	-.0035773
suprtw2	-.0064369	.005962	-1.08	0.280	-.0181221	.0052483

suchrw2	.0058273	.0067013	0.87	0.385	-.0073069	.0189615
havmilsq	-8.06e-07	2.86e-06	-0.28	0.778	-6.41e-06	4.80e-06
_cons	9.013612	998.8259	0.01	0.993	-1948.649	1966.676

Logistic model for HP2vacatn

Classified	True D	True ~D	Total
+	**31**	**10**	**41**
-	**31**	**282**	**313**
Total	**62**	**292**	**354**

Classified + if predicted Pr(D) >= .5
True D defined as HP2vacatn != 0

Sensitivity	Pr(+| D)	**50.00%**
Specificity	Pr(-|~D)	**96.58%**
Positive predictive value	Pr(D| +)	**75.61%**
Negative predictive value	Pr(~D| -)	**90.10%**
False + rate for true ~D	Pr(+|~D)	**3.42%**
False - rate for true D	Pr(-| D)	**50.00%**
False + rate for classified +	Pr(~D| +)	**24.39%**
False - rate for classified -	Pr(D| -)	**9.90%**
Correctly classified		**88.42%**

Logistic model for HP2vacatn, goodness-of-fit test

```
       number of observations =       354
 number of covariate patterns =       354
             Pearson chi2(309) =       372.41
                   Prob > chi2 =         0.0077
```

Measures of Fit for **logit** of **HP2vacatn**

```
    Log-Lik Intercept Only:      -164.237    Log-Lik Full Model:           -108.281
    D(305):                       216.562    LR(44):                        111.912
                                             Prob > LR:                       0.000
    McFadden's R2:                  0.341    McFadden's Adj R2:               0.042
    Maximum Likelihood R2:          0.271    Cragg & Uhler's R2:              0.448
    McKelvey and Zavoina's R2:      0.585    Efron's R2:                      0.371
    Variance of y*:                 7.926    Variance of error:               3.290
    Count R2:                       0.884    Adj Count R2:                    0.339
    AIC:                            0.889    AIC*n:                         314.562
    BIC:                        -1573.574    BIC':                          146.338

120 .
121 . set more off

122 . *-----Chunk 2 dosew2 moderator paid employment impact----------------------
    > ----
123 . title "1.  H1 pt2 wv 2 male cum rad dose wrt HP2work impact "


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****       1.  H1 pt2 wv 2 male cum rad dose wrt HP2work impact          ****
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****                                            17 Jun 2012    10:03:32  ****
    > *
    ******************************************************************************
    > *
    ******************************************************************************
    > *
```

```
124 . * male models
125 .         forvalues j = 2/2 {
  2.         set more off
  3. title4 "trimmed HP2work main effects models wave 2 for H1 part 2 with dos
> e ns"
  4. title4 "Wave `j' dose HP2work relationship but avgcumdosew`j': Dose not s
> ignif"
  5. di _skip(2)
  6. di as input "Gender =1 HP2work model"
  7.         logit HP2work age bf4 bf40  illw`j' movew`j' shrelaw`j' ///
>            avgcumdosew`j' radhlw`j' if gender==1
  8.                         estat class
  9.                         estat gof
 10.                         fitstat
 11. }
```

```
trimmed HP2work main effects models wave 2 for H1 part 2 with dose ns
```

```
Wave 2 dose HP2work relationship but avgcumdosew2: Dose not signif
```

```
Gender =1 HP2work model

Iteration 0:   log likelihood = -172.64201
Iteration 1:   log likelihood = -143.10953
Iteration 2:   log likelihood = -140.75282
Iteration 3:   log likelihood = -140.73717
Iteration 4:   log likelihood = -140.73717

Logistic regression                               Number of obs   =        339
                                                  LR chi2(8)      =      63.81
                                                  Prob > chi2     =     0.0000
Log likelihood = -140.73717                       Pseudo R2       =     0.1848
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0047169	.0143138	0.33	0.742	-.0233376	.0327714
bf4	-.1503587	.0356506	-4.22	0.000	-.2202327	-.0804848
bf40	.3523359	.1019141	3.46	0.001	.1525879	.5520839
illw2	-.0335556	.2419386	-0.14	0.890	-.5077465	.4406354
movew2	.5741457	.3222115	1.78	0.075	-.0573772	1.205669
shrelaw2	-.007559	.0045614	-1.66	0.097	-.0164991	.0013811
avgcumdosew2	.0038936	.0526483	0.07	0.941	-.0992953	.1070824
radhlw2	.00178	.0052528	0.34	0.735	-.0085154	.0120754
_cons	-.7511547	.9928636	-0.76	0.449	-2.697132	1.194822

Logistic model for HP2work

Classified	True D	True ~D	Total
+	**21**	**13**	**34**
-	**49**	**256**	**305**
Total	**70**	**269**	**339**

Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0

Sensitivity	Pr(+| D)	**30.00%**
Specificity	Pr(-|~D)	**95.17%**
Positive predictive value	Pr(D| +)	**61.76%**
Negative predictive value	Pr(~D| -)	**83.93%**
False + rate for true ~D	Pr(+|~D)	**4.83%**
False - rate for true D	Pr(-| D)	**70.00%**
False + rate for classified +	Pr(~D| +)	**38.24%**
False - rate for classified -	Pr(D| -)	**16.07%**
Correctly classified		**81.71%**

Logistic model for HP2work, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       334
            Pearson chi2(325) =       305.63
                  Prob > chi2 =         0.7731
```

Measures of Fit for **logit** of **HP2work**

Log-Lik Intercept Only:	**-172.642**	Log-Lik Full Model:	**-140.737**
D(330):	**281.474**	LR(8):	**63.810**
		Prob > LR:	**0.000**
McFadden's R2:	**0.185**	McFadden's Adj R2:	**0.133**
Maximum Likelihood R2:	**0.172**	Cragg & Uhler's R2:	**0.269**
McKelvey and Zavoina's R2:	**0.282**	Efron's R2:	**0.184**
Variance of y*:	**4.584**	Variance of error:	**3.290**
Count R2:	**0.817**	Adj Count R2:	**0.114**
AIC:	**0.883**	AIC*n:	**299.474**
BIC:	**-1641.106**	BIC':	**-17.202**

```
126 .
127 . title4 "Constructing male moderators of HP2work in wave 2"
    ───────────────────────────────────────────────────────────────────────────────
    Constructing male moderators of HP2work in wave 2
    ───────────────────────────────────────────────────────────────────────────────


128 . * construction of potential moderators
129 .
130 . set more off

131 . foreach var in bf4 bf40 {
      2. cap gen `var'Xd2 = `var'*avgcumdosew2
      3. label var `var'Xd2  "interaction of avgcumdosew2 and `var'"
      4. }

132 .
133 .
134 .
135 .
136 . des bf4 bf40

                  storage  display     value
    variable name   type   format      label      variable label
    ───────────────────────────────────────────────────────────────────────────────
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                    1.01635E-007)

137 . forvalues j = 2/2 {
      2. title4 "trimmed HP2work main effects models wave `j' " "male model for H1
    >  part 2 with dose ns"
      3. title2 "Wave `j dose HP2work relationship but avgcumdosew`j': Dose not si
    > gnif"
      4. }
    ───────────────────────────────────────────────────────────────────────────────
    trimmed HP2work main effects models wave 2
    ───────────────────────────────────────────────────────────────────────────────
    ───────────────────────────────────────────────────────────────────────────────
    title2: Wave `j dose HP2work relationship but avgcumdosew2: Dose not signif
                                           Date and time:  17 Jun 2012    10:03:34
                                           Working directory:  /Users/robertyaffee
    > /Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2
                                           Stata data file:  chwide16june2012.dta
    >  has  2376  variables and  703  observations

    Wave `j dose HP2work relationship but avgcumdosew2: Dose not signif
    ───────────────────────────────────────────────────────────────────────────────
```

```
138 .
139 .
140 . set more off

141 .
142 . forvalues j = 2/2 {
  2.                 sw, pr(.1):logistic HP2work age bf4 bf40 movew`j' shrelaw
> `j'  ///
>                 avgcumdosew`j' illw2 radhlw`j' bf4Xd2 bf40Xd2 if gender==1,
> coef
  3.                         estat class
  4.                         estat gof
  5.                         fitstat
  6. }
                      begin with full model
p = 0.9757 >= 0.1000  removing illw2
p = 0.7795 >= 0.1000  removing radhlw2
p = 0.7737 >= 0.1000  removing avgcumdosew2
p = 0.6592 >= 0.1000  removing age
p = 0.3222 >= 0.1000  removing bf40Xd2
p = 0.8752 >= 0.1000  removing bf4Xd2

Logistic regression                               Number of obs   =        339
                                                  LR chi2(4)      =      63.51
                                                  Prob > chi2     =     0.0000
Log likelihood = -140.88616                       Pseudo R2       =     0.1839

------------------------------------------------------------------------------
     HP2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    shrelaw2 |  -.0075236   .0045549    -1.65   0.099     -.016451    .0014037
         bf4 |  -.1587735   .0291898    -5.44   0.000    -.2159845   -.1015625
        bf40 |   .3608735   .0919302     3.93   0.000     .1806936    .5410534
      movew2 |   .5377149   .3084581     1.74   0.081    -.0668519    1.142282
       _cons |  -.3430408   .4475445    -0.77   0.443    -1.220212    .5341304
------------------------------------------------------------------------------

Logistic model for HP2work

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        21            15  |         36
     -     |        49           254  |        303
-----------+--------------------------+-----------
   Total   |        70           269  |        339
```

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   30.00%
Specificity                     Pr( -|~D)   94.42%
Positive predictive value       Pr( D| +)   58.33%
Negative predictive value       Pr(~D| -)   83.83%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    5.58%
False - rate for true D         Pr( -| D)   70.00%
False + rate for classified +   Pr(~D| +)   41.67%
False - rate for classified -   Pr( D| -)   16.17%
--------------------------------------------------
Correctly classified                        81.12%
--------------------------------------------------
```

Logistic model for HP2work, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       210
            Pearson chi2(205) =       208.24
                  Prob > chi2 =         0.4238
```

Measures of Fit for **logistic** of **HP2work**

```
Log-Lik Intercept Only:     -172.642   Log-Lik Full Model:          -140.886
D(334):                      281.772   LR(4):                         63.512
                                       Prob > LR:                      0.000
McFadden's R2:                 0.184   McFadden's Adj R2:              0.155
Maximum Likelihood R2:         0.171   Cragg & Uhler's R2:             0.267
McKelvey and Zavoina's R2:     0.279   Efron's R2:                     0.182
Variance of y*:                4.565   Variance of error:              3.290
Count R2:                      0.811   Adj Count R2:                   0.086
AIC:                           0.861   AIC*n:                        291.772
BIC:                       -1664.112   BIC':                         -40.208
```

```
143 .
144 .
145 .
146 . * capturing significant vars from last analysis
147 . local cn1: colnames(e(b))

148 . di "`cn1'"
    shrelaw2 bf4 bf40 movew2 _cons

149 . local leng1 = length( "`cn1'")

150 . di `leng1'
    30

151 . local leng1b `leng1'-6

152 . di `leng1b'
    24

153 . local nuvlist = substr("`cn1'",1,`leng1b')

154 . di "`nuvlist'"
    shrelaw2 bf4 bf40 movew2

155 . local rhsvars = "`nuvlist'"

156 . local nuvlist= "`nuvlist'"

157 . local nuvlist= substr("`cn1'",1,`leng1b')

158 . di "`nuvlist'"
    shrelaw2 bf4 bf40 movew2

159 . sw, pr(.1):logit hp2hmcare `nuvlist' if gender==1
                          begin with full model
    p = 0.9705 >= 0.1000  removing movew2
    p = 0.6621 >= 0.1000  removing shrelaw2

    Logistic regression                               Number of obs   =        339
                                                      LR chi2(2)      =      81.34
                                                      Prob > chi2     =     0.0000
    Log likelihood = -131.97405                       Pseudo R2       =     0.2356
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf40	**.1682682**	**.0893164**	**1.88**	**0.060**	**-.0067887**	**.3433251**
bf4	**-.2243001**	**.0309592**	**-7.25**	**0.000**	**-.2849791**	**-.1636212**
_cons	**.7247699**	**.4549691**	**1.59**	**0.111**	**-.1669531**	**1.616493**

```
160 . di "`rhsvars'"
    shrelaw2 bf4 bf40 movew2

161 . matrix define c=e(b)

162 . local cn2: colnames(c)

163 . di "`cn2'"
    bf40 bf4 _cons

164 . local leng2 = length("`cn2'")

165 . local leng2b = `leng2'-6

166 . local rhsvars = substr("`cn2'",1,`leng2b')

167 . logit hp2work `rhsvars' if gender==1

    Iteration 0:   log likelihood = -172.87291
    Iteration 1:   log likelihood = -146.01734
    Iteration 2:   log likelihood = -144.08312
    Iteration 3:   log likelihood = -144.07356
    Iteration 4:   log likelihood = -144.07356

    Logistic regression                               Number of obs   =        340
                                                      LR chi2(2)      =      57.60
                                                      Prob > chi2     =     0.0000
    Log likelihood = -144.07356                       Pseudo R2       =     0.1666
```

hp2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf40	**.3278445**	**.0853217**	**3.84**	**0.000**	**.160617**	**.495072**
bf4	**-.1439508**	**.0277538**	**-5.19**	**0.000**	**-.1983472**	**-.0895544**
_cons	**-.5378471**	**.4253878**	**-1.26**	**0.206**	**-1.371592**	**.2958977**

```
168 .
169 .
170 .
171 . di "`rhsvars'"
    bf40 bf4

172 . local varlist2 =substr("`rhsvars'",1,9)

173 . di "`varlist2'"
    bf40 bf4

174 .
175 .  * constructing potential moderators
176 . foreach var in age illw2 {
      2. cap gen `var'Xd2 = `var'* avgcumdosew2
      3. }

177 .
178 . *x  no signif male moderators for paid employment
179 . set more off

180 . sw, pr(.1): logistic hp2work `rhsvars' illw2Xd2 if gender==1, coef
                      begin with full model
    p = 0.3950 >= 0.1000  removing illw2Xd2

    Logistic regression                               Number of obs   =        340
                                                      LR chi2(2)      =      57.60
                                                      Prob > chi2     =     0.0000
    Log likelihood = -144.07356                       Pseudo R2       =     0.1666
```

hp2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf40	.3278445	.0853217	3.84	0.000	.160617	.495072
bf4	-.1439508	.0277538	-5.19	0.000	-.1983472	-.0895544
_cons	-.5378471	.4253878	-1.26	0.206	-1.371592	.2958977

```
181 . fitstat

    Measures of Fit for logistic of hp2work

    Log-Lik Intercept Only:      -172.873     Log-Lik Full Model:            -144.074
    D(337):                       288.147     LR(2):                           57.599
                                              Prob > LR:                        0.000
    McFadden's R2:                  0.167     McFadden's Adj R2:                0.149
    Maximum Likelihood R2:          0.156     Cragg & Uhler's R2:               0.244
    McKelvey and Zavoina's R2:      0.248     Efron's R2:                       0.162
    Variance of y*:                 4.375     Variance of error:                3.290
    Count R2:                       0.806     Adj Count R2:                     0.057
    AIC:                            0.865     AIC*n:                          294.147
    BIC:                        -1676.208     BIC':                           -45.941

182 .
183 . scalar wkModMw2 = "none"

184 . di _skip(2)


185 . title4 "testing the female moderator model Hp2work H1 Pt 2 wave 2"

    testing the female moderator model Hp2work H1 Pt 2 wave 2


186 . *  Testing female moderator model xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
    > xxxx
187 .
188 . title4 "testing general female moderator model for hp2work"

    testing general female moderator model for hp2work


189 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

190 . di _skip(4)
```

```
191 .
192 . di _skip(4)



193 .
194 . forvalues j = 2/2 {
  2. set more off
  3. di _skip(4)
  4. di as input "For females hp2work on wave 2 with dose ns"
  5. des  age occ1w`j'-occ8w`j' inc1w`j'-inc4w`j' avgcumdosew`j' `w2bf'
  6. sw, pr(.1): logistic HP2work  age  havmilsq ///
>    avgcumdosew2  illw`j' shjobw`j' suprtw`j' radhlw`j' if gender==2, coef
  7. estat gof
  8. estat class
  9. fitstat
 10. }

For females hp2work on wave 2 with dose ns

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
age             double %8.0g                * Respondent's age
occ1w2          double %15.0g      LABJ       profess executive administration
                                                in 1996
occ2w2          double %15.0g      LABJ       technical sales admin support in
                                                1996
occ3w2          double %15.0g      LABJ       service occup protective
                                                services in 1996
occ4w2          double %15.0g      LABJ       precision prod mechan craft
                                                construction in 1996
occ5w2          double %15.0g      LABJ       factory laborer machinist transp
                                                cleaner in 1996
occ6w2          double %15.0g      LABJ       farming agricul forestry fishing
                                                trapping logging in 1996
occ7w2          double %15.0g      LABJ       homemaking caregiving in 1996
occ8w2          double %15.0g      LABJ       student in 1996
inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                basic neccessities in 1996
inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                basic neccessities in 1996
inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                plus extra purchases/savings
                                                in 1996
inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                afford luxury items in 1996
avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                for wave 2
bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
```

```
bf4               float  %9.0g                bf4 = max(0, 24 - BSIsoma)
bf6               float  %9.0g                bf6= max(0, radtlw2 - 10)
bf7               float  %9.0g                bf7= max(0, 10 - radtlw2)
bf14              float  %9.0g                bf14= max(0, radw2 - 10) * bf12
bf15              float  %9.0g                bf15= max(0, 10 - radw2) * bf12
bf40              float  %9.0g                bf40 = max(0, icdxcnt -
                                                1.01635E-007)
                      begin with full model
p = 0.9490 >= 0.1000  removing shjobw2
p = 0.5496 >= 0.1000  removing havmilsq
p = 0.4955 >= 0.1000  removing suprtw2
p = 0.2666 >= 0.1000  removing avgcumdosew2
p = 0.1232 >= 0.1000  removing illw2

Logistic regression                               Number of obs   =        363
                                                  LR chi2(2)      =      49.29
                                                  Prob > chi2     =     0.0000
Log likelihood = -181.91527                       Pseudo R2       =     0.1193
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0632993	.0119444	5.30	0.000	.0398887	.08671
radhlw2	.010972	.0040298	2.72	0.006	.0030737	.0188703
_cons	-5.088259	.6777663	-7.51	0.000	-6.416656	-3.759861

Logistic model for HP2work, goodness-of-fit test

```
      number of observations =       363
 number of covariate patterns =       219
            Pearson chi2(216) =       254.55
                  Prob > chi2 =         0.0370
```

Logistic model for HP2work

Classified	True D	True ~D	Total
+	20	7	27
-	73	263	336
Total	93	270	363

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   21.51%
Specificity                     Pr( -|~D)   97.41%
Positive predictive value       Pr( D| +)   74.07%
Negative predictive value       Pr(~D| -)   78.27%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    2.59%
False - rate for true D         Pr( -| D)   78.49%
False + rate for classified +   Pr(~D| +)   25.93%
False - rate for classified -   Pr( D| -)   21.73%
--------------------------------------------------
Correctly classified                        77.96%
--------------------------------------------------

Measures of Fit for logistic of HP2work

Log-Lik Intercept Only:     -206.563   Log-Lik Full Model:          -181.915
D(360):                      363.831   LR(2):                         49.295
                                       Prob > LR:                      0.000
McFadden's R2:                 0.119   McFadden's Adj R2:              0.105
Maximum Likelihood R2:         0.127   Cragg & Uhler's R2:             0.187
McKelvey and Zavoina's R2:     0.205   Efron's R2:                     0.150
Variance of y*:                4.139   Variance of error:              3.290
Count R2:                      0.780   Adj Count R2:                   0.140
AIC:                           1.019   AIC*n:                        369.831
BIC:                       -1758.154   BIC':                         -37.506

.
. replace ageXd2 = age*avgcumdosew2
(0 real changes made)

.
. * capturing significant vars
. local cn3: colnames(e(b))
```

```
200 . di "`cn3'"
    age radhlw2 _cons

201 . local leng3 = length( "`cn3'")

202 . di `leng3'
    17

203 . local leng3b `leng3'-6

204 . di `leng3b'
    11

205 . local nuvlist3 = substr("`cn3'",1,`leng3b')

206 . di "`nuvlist3'"
    age radhlw2

207 . local rhsvars3 = "`nuvlist3'"

208 . local rhsvars4= substr("`cn3'",1,`leng3b')

209 . di "`rhsvars4'"
    age radhlw2

210 .
211 . * moderators for hp2work female and male are saved as scalars:
212 . scalar wkModFw2="none"

213 . scalar wkModMw2="none"

214 . cap gen ageXd2 = age*avgcumdosew2

215 .
216 . *x no significant female moderator for paid employment
217 . forvalues j = 2/2 {
      2. di as input "For females hp2probsoc on wave 2 with dose ns"
      3. des  age occ1w`j'-occ8w`j' inc1w`j'-inc4w`j' avgcumdosew`j'
      4. set more off
      5. sw, pr(.1): logistic HP2work  bf4 bf14  age  havmil ///
    >    avgcumdosew2  ageXd2 illw`j' accdw`j'  suprtw`j' if gender==2, coef
      6. estat gof
      7. estat class
      8. fitstat
      9. }
    For females hp2probsoc on wave 2 with dose ns
```

```
                storage  display     value
variable name     type   format      label      variable label
-------------------------------------------------------------------------------
age               double %8.0g                * Respondent's age
occ1w2            double %15.0g      LABJ       profess executive administration
                                                  in 1996
occ2w2            double %15.0g      LABJ       technical sales admin support in
                                                  1996
occ3w2            double %15.0g      LABJ       service occup protective
                                                  services in 1996
occ4w2            double %15.0g      LABJ       precision prod mechan craft
                                                  construction in 1996
occ5w2            double %15.0g      LABJ       factory laborer machinist transp
                                                  cleaner in 1996
occ6w2            double %15.0g      LABJ       farming agricul forestry fishing
                                                  trapping logging in 1996
occ7w2            double %15.0g      LABJ       homemaking caregiving in 1996
occ8w2            double %15.0g      LABJ       student in 1996
inc1w2            double %15.0g      LABJ       Income is not sufficient for
                                                  basic neccessities in 1996
inc2w2            double %15.0g      LABJ       Income is just sufficient for
                                                  basic neccessities in 1996
inc3w2            double %15.0g      LABJ       Income is sufficient for basics
                                                  plus extra purchases/savings
                                                  in 1996
inc4w2            double %15.0g      LABJ       Income allows to comfortably
                                                  afford luxury items in 1996
avgcumdosew2      double %8.0g                  Average mean dose CS1337 in mGy
                                                  for wave 2
                      begin with full model
p = 0.9295 >= 0.1000  removing suprtw2
p = 0.8298 >= 0.1000  removing ageXd2
p = 0.3867 >= 0.1000  removing havmil
p = 0.4373 >= 0.1000  removing accdw2
p = 0.3450 >= 0.1000  removing illw2
p = 0.1908 >= 0.1000  removing bf14
p = 0.2277 >= 0.1000  removing avgcumdosew2

Logistic regression                               Number of obs   =        363
                                                  LR chi2(2)      =      60.00
                                                  Prob > chi2     =     0.0000
Log likelihood = -176.56392                       Pseudo R2       =     0.1452
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.111911**	**.026544**	**-4.22**	**0.000**	**-.1639364**	**-.0598857**
age	**.0513174**	**.012385**	**4.14**	**0.000**	**.0270434**	**.0755915**
_cons	**-2.690984**	**.784746**	**-3.43**	**0.001**	**-4.229058**	**-1.152911**

Logistic model for HP2work, goodness-of-fit test

```
      number of observations =       363
 number of covariate patterns =       275
           Pearson chi2(272) =       304.33
                 Prob > chi2 =         0.0864
```

Logistic model for HP2work

Classified	True D	True ~D	Total
+	**31**	**18**	**49**
-	**62**	**252**	**314**
Total	**93**	**270**	**363**

Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0

Sensitivity	Pr(+| D)	**33.33%**
Specificity	Pr(-|~D)	**93.33%**
Positive predictive value	Pr(D| +)	**63.27%**
Negative predictive value	Pr(~D| -)	**80.25%**
False + rate for true ~D	Pr(+|~D)	**6.67%**
False - rate for true D	Pr(-| D)	**66.67%**
False + rate for classified +	Pr(~D| +)	**36.73%**
False - rate for classified -	Pr(D| -)	**19.75%**
Correctly classified		**77.96%**

Measures of Fit for **logistic** of **HP2work**

```
Log-Lik Intercept Only:      -206.563     Log-Lik Full Model:          -176.564
D(360):                       353.128     LR(2):                         59.997
                                          Prob > LR:                      0.000
McFadden's R2:                  0.145     McFadden's Adj R2:              0.131
Maximum Likelihood R2:          0.152     Cragg & Uhler's R2:             0.224
McKelvey and Zavoina's R2:      0.236     Efron's R2:                     0.175
Variance of y*:                 4.304     Variance of error:              3.290
Count R2:                       0.780     Adj Count R2:                   0.140
AIC:                            0.989     AIC*n:                        359.128
BIC:                        -1768.857     BIC':                         -48.208

218 .
219 . scalar SigDoseFw2 = "no"

220 . scalar MainEffwkFw2 = "bf4 age"

221 . ******   Moderator analysis for Dose=>paid employment wave two
222 . * testing potential moderators for women in wave 2
223 . set more off

224 . forvalues j = 2/2 {
  2.                 sw, pr(.1):logistic HP2work age occ1w2-occ8w2 bf8 illw`j'
>  shjobw`j' havmilsq ///
>                avgcumdosew`j' ageXd2 if gender==2, coef
  3.                         estat class
  4.                         estat gof
  5.                         fitstat
  6. }
                      begin with full model
p = 0.9355 >= 0.1000  removing ageXd2
p = 0.8719 >= 0.1000  removing occ4w2
p = 0.8698 >= 0.1000  removing occ7w2
p = 0.7960 >= 0.1000  removing occ3w2
p = 0.7591 >= 0.1000  removing occ8w2
p = 0.7163 >= 0.1000  removing bf8
p = 0.6916 >= 0.1000  removing shjobw2
p = 0.4726 >= 0.1000  removing havmilsq
p = 0.4933 >= 0.1000  removing occ6w2
p = 0.2614 >= 0.1000  removing occ2w2
p = 0.2755 >= 0.1000  removing occ5w2
p = 0.1676 >= 0.1000  removing avgcumdosew2

Logistic regression                               Number of obs   =        363
                                                  LR chi2(3)      =      48.19
                                                  Prob > chi2     =     0.0000
Log likelihood = -182.46517                       Pseudo R2       =     0.1167
```

HP2work	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
age	.0659116	.011721	5.62	0.000	.0429388	.0888845
occ1w2	-.4960407	.2867447	-1.73	0.084	-1.05805	.0659686
illw2	.2464522	.136963	1.80	0.072	-.0219903	.5148947
_cons	-4.483066	.652266	-6.87	0.000	-5.761484	-3.204648

Logistic model for HP2work

	True		
Classified	D	~D	Total
+	23	8	31
-	70	262	332
Total	93	270	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2work != 0

Sensitivity	Pr(+| D)	24.73%
Specificity	Pr(-|~D)	97.04%
Positive predictive value	Pr(D| +)	74.19%
Negative predictive value	Pr(~D| -)	78.92%
False + rate for true ~D	Pr(+|~D)	2.96%
False - rate for true D	Pr(-| D)	75.27%
False + rate for classified +	Pr(~D| +)	25.81%
False - rate for classified -	Pr(D| -)	21.08%
Correctly classified		78.51%

Logistic model for HP2work, goodness-of-fit test

number of observations = **363**
number of covariate patterns = **154**
Pearson chi2(**150**) = **156.96**
Prob > chi2 = **0.3320**

Measures of Fit for **logistic** of **HP2work**

```
    Log-Lik Intercept Only:      -206.563    Log-Lik Full Model:          -182.465
    D(359):                       364.930    LR(3):                         48.195
                                             Prob > LR:                      0.000
    McFadden's R2:                  0.117    McFadden's Adj R2:              0.097
    Maximum Likelihood R2:          0.124    Cragg & Uhler's R2:             0.183
    McKelvey and Zavoina's R2:      0.193    Efron's R2:                     0.149
    Variance of y*:                 4.079    Variance of error:              3.290
    Count R2:                       0.785    Adj Count R2:                   0.161
    AIC:                            1.027    AIC*n:                        372.930
    BIC:                        -1751.160    BIC':                         -30.512

225 .
226 . * capturing significant vars
227 . local cn5: colnames(e(b))

228 . di "`cn5'"
    age occ1w2 illw2 _cons

229 . local leng5 = length( "`cn5'")

230 . di `leng5'
    22

231 . local leng5b `leng5'-6

232 . di `leng5b'
    16

233 . local nuvlist5 = substr("`cn5'",1,`leng5b')

234 . di "`nuvlist5'"
    age occ1w2 illw2

235 . local rhsvars5 = "`nuvlist2'"

236 . local nuvlist6= "`nuvlist2'"
```

```
237 . local nuvlist6= substr("`cn5'",1,`leng5b')

238 . di "`nuvlist6'"
    age occ1w2 illw2

239 .
240 . foreach varx in `nuvlist6' {
      2.  gen `varx'X`vary' =  `varx'*avgcumdosew2
      3.  }

241 .
242 . cap gen illw2Xd2 = illw2*avgcumdosew2

243 .
244 . sw, pr(.1): regress hp2hmcare age illw2 ageXd2 illw2Xd2 if gender==2
                      begin with full model
    p = 0.7203 >= 0.1000  removing illw2
    p = 0.8352 >= 0.1000  removing illw2Xd2

      Source |       SS       df       MS              Number of obs =     363
-------------+------------------------------           F(  2,   360) =   44.59
       Model |  16.2705222     2  8.13526112           Prob > F      =  0.0000
    Residual |  65.6854006   360  .182459446           R-squared     =  0.1985
-------------+------------------------------           Adj R-squared =  0.1941
       Total |  81.9559229   362  .226397577           Root MSE      =  .42715

------------------------------------------------------------------------------
   hp2hmcare |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0184548    .001962     9.41   0.000     .0145963    .0223134
      ageXd2 |  -.0004777   .0002831    -1.69   0.092    -.0010343     .000079
       _cons |  -.5595097   .0984132    -5.69   0.000    -.7530467   -.3659728
------------------------------------------------------------------------------

245 .
246 .
247 . scalar SigDoseWkFw2 = "no"
```

```
248 . scalar SigDoseWkMw2 = "no"

249 . des bf4 bf40

              storage  display     value
variable name   type   format      label      variable label
-----------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                1.01635E-007)

250 . scalar MainEffwkMw2 = "bf4 bf40"

251 . scalar MainEffwkFw2 = "age "

252 . scalar WKModMw2 = "none"

253 . scalar WkModFw2 = "none"

254 .
255 .
256 . * male sign main effects in main effects model: 2- bf4, bf40
257 . * male and female main effects model avgcumdosew2 were not signif.
258 . * male hp2wk w2  mediators: bf4 and bf40
259 . * female signif main effects in main effects model
260 .
261 . title4  "H1 pt 2 wave 2 Mediation of paid employment testing for males"
-----------------------------------------------------------------------------
H1 pt 2 wave 2 Mediation of paid employment testing for males
-----------------------------------------------------------------------------

262 .
263 . * male hp2wk w2 mediators:  testing b4 and b40
264 .
265 . cap gen ageXillw2 = age*illw2

266 . correlate bf4 age if gender==1
(obs=340)

             |      bf4      age
-------------+------------------
         bf4 |   1.0000
         age |  -0.4041   1.0000
```

```
267 .
268 . des bf4

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)

269 . title4 "Possible male mediators in wave 2" "bf4 can be a male mediator in wa
> ve 2"
-------------------------------------------------------------------------------
Possible male mediators in wave 2
-------------------------------------------------------------------------------

270 . glm bf4 age avgcumdosew2 if gender==1, fam(gauss) link(identity)

Iteration 0:   log likelihood = -996.64953

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       337
                                                   Scale parameter =   20.7725
Deviance         =  7000.331927                    (1/df) Deviance =   20.7725
Pearson          =  7000.331927                    (1/df) Pearson  =   20.7725

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  5.880291
Log likelihood   = -996.6495299                    BIC             =  5035.977

-------------------------------------------------------------------------------
             |                 OIM
         bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
         age |  -.1659274   .0203994    -8.13   0.000    -.2059095   -.1259453
avgcumdosew2 |   .0636104   .0995687     0.64   0.523    -.1315406    .2587614
       _cons |   20.59657   1.026594    20.06   0.000     18.58448    22.60866
-------------------------------------------------------------------------------
```

```
271 . glm hp2work bf4 age if gender==1, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  301.2605
    Iteration 2:   deviance =  300.0274
    Iteration 3:   deviance =  300.0164
    Iteration 4:   deviance =  300.0164
    Iteration 5:   deviance =  300.0164

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       337
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  300.0163532                    (1/df) Deviance =  .8902562
    Pearson          =  314.8938558                    (1/df) Pearson  =  .9344031

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1664.338
```

hp2work	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	-.0931666	.0158695	-5.87	0.000	-.1242703	-.0620629
age	.0091277	.0069101	1.32	0.187	-.0044158	.0226712
_cons	-.2100706	.4592867	-0.46	0.647	-1.110256	.6901148

```
    (Standard errors scaled using square root of deviance-based dispersion.)

272 . title4 "bf4 can be a paid employment mediator for men"

    bf4 can be a paid employment mediator for men


273 .
274 .
275 . title4 "Age can be a male mediator in wave 2"

    Age can be a male mediator in wave 2
```

```
276 . glm age avgcumdosew2 if gender==1, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -1330.6004

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       338
                                                       Scale parameter =  147.6853
    Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
    Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  7.838826
    Log likelihood   =   -1330.6004                    BIC             =  47947.46

    ------------------------------------------------------------------------------
                 |                 OIM
             age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   .5832314   .2635871     2.21   0.027     .0666101    1.099853
           _cons |   48.62133   .7061562    68.85   0.000     47.23729    50.00537
    ------------------------------------------------------------------------------

277 . glm hp2work age if gender==1, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  332.6127
    Iteration 2:   deviance =  332.2035
    Iteration 3:   deviance =  332.2034
    Iteration 4:   deviance =  332.2034

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       338
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  332.2034085                    (1/df) Deviance =  .9828503
    Pearson          =  339.5831812                    (1/df) Pearson  =  1.004684

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1637.98
```

```
                            EIM
     hp2work        Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]

         age     .0233394   .0063554     3.67   0.000     .0108831    .0357956
       _cons    -2.001321   .3351159    -5.97   0.000    -2.658136   -1.344506

(Standard errors scaled using square root of deviance-based dispersion.)

278 . title4 "age could be a paid employment mediator for men in wave 2"

age could be a paid employment mediator for men in wave 2


279 .
280 . des bf4

              storage  display     value
variable name   type   format      label      variable label

bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)

281 . title4 "Age can be a male mediator in wave 2"

Age can be a male mediator in wave 2


282 . glm age bf4 avgcumdosew2 if gender==1, fam(gauss) link(identity)

Iteration 0:   log likelihood = -1300.1274

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       337
                                                   Scale parameter =  123.8157
Deviance         =  41725.88285                    (1/df) Deviance =  123.8157
Pearson          =  41725.88285                    (1/df) Pearson  =  123.8157

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  7.665455
Log likelihood   = -1300.127421                    BIC             =  39761.53
```

```
------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf4 |  -.9890198   .1215918    -8.13   0.000    -1.227335   -.7507042
avgcumdosew2 |   .5504319   .2413815     2.28   0.023     .0773329    1.023531
       _cons |   61.01272   1.654952    36.87   0.000     57.76907    64.25636
------------------------------------------------------------------------------

283 . glm hp2work bf4 age if gender==1, fam(binomial) link(probit) irls scale(dev)

Iteration 1:   deviance =  301.2605
Iteration 2:   deviance =  300.0274
Iteration 3:   deviance =  300.0164
Iteration 4:   deviance =  300.0164
Iteration 5:   deviance =  300.0164

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       337
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  300.0163532                    (1/df) Deviance =  .8902562
Pearson          =  314.8938558                    (1/df) Pearson  =  .9344031

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1664.338

------------------------------------------------------------------------------
             |                 EIM
     hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf4 |  -.0931666   .0158695    -5.87   0.000    -.1242703   -.0620629
         age |   .0091277   .0069101     1.32   0.187    -.0044158    .0226712
       _cons |  -.2100706   .4592867    -0.46   0.647    -1.110256    .6901148
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)
```

```
284 . title4 "age is not likely to be a male mediator with bf4 for paid employment
>  in wave 2"
```

age is not likely to be a male mediator with bf4 for paid employment in wave 2

```
285 .
286 .
287 .
288 . des bf4
```

variable name	storage type	display format	value label	variable label
bf4	float	%9.0g		**bf4 = max(0, 24 - BSIsoma)**

```
289 . title4 "bf4 is not likely to be a male paid employment mediator in wave 2"
```

bf4 is not likely to be a male paid employment mediator in wave 2

```
290 . mvreg age bf4 bf40 illw2 ageXillw2 = avgcumdosew2 if gender==1
```

Equation	Obs	Parms	RMSE	"R-sq"	F	P
age	**340**	**2**	**12.15259**	**0.0143**	**4.89591**	**0.0276**
bf4	**340**	**2**	**4.97766**	**0.0003**	**.0943548**	**0.7589**
bf40	**340**	**2**	**1.686178**	**0.0051**	**1.736932**	**0.1884**
illw2	**340**	**2**	**.5927047**	**0.0013**	**.4415312**	**0.5068**
ageXillw2	**340**	**2**	**32.91663**	**0.0022**	**.7442227**	**0.3889**

	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
age						
avgcumdosew2	**.5832314**	**.2635871**	**2.21**	**0.028**	**.0647536**	**1.101709**
_cons	**48.62133**	**.7061562**	**68.85**	**0.000**	**47.23231**	**50.01034**
bf4						
avgcumdosew2	**-.0331637**	**.1079644**	**-0.31**	**0.759**	**-.2455305**	**.1792032**
_cons	**12.52896**	**.2892393**	**43.32**	**0.000**	**11.96002**	**13.0979**
bf40						
avgcumdosew2	**.0482004**	**.0365729**	**1.32**	**0.188**	**-.0237387**	**.1201394**
_cons	**2.097753**	**.0979795**	**21.41**	**0.000**	**1.905026**	**2.290479**
illw2						
avgcumdosew2	**.0085423**	**.0128556**	**0.66**	**0.507**	**-.0167449**	**.0338294**
_cons	**.2741359**	**.0344406**	**7.96**	**0.000**	**.206391**	**.3418808**

```
              |
--------------+----------------------------------------------------------------
ageXillw2     |
 avgcumdosew2 |   .6159172   .7139551     0.86   0.389    -.7884376    2.020272
        _cons |   14.92518   1.912703     7.80   0.000     11.16288    18.68748
-------------------------------------------------------------------------------

291 . glm hp2work bf40 ageXillw2 age illw2 if gender==1, fam(binomial) link(probit
> ) ///
>    irls scale(dev)

Iteration 1:   deviance =  308.9955
Iteration 2:   deviance =  308.2796
Iteration 3:   deviance =  308.2778
Iteration 4:   deviance =  308.2778
Iteration 5:   deviance =  308.2778

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       335
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  308.2777886                    (1/df) Deviance =  .9202322
Pearson          =  335.9124972                    (1/df) Pearson  =  1.002724

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1644.419

------------------------------------------------------------------------------
             |                 EIM
     hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        bf40 |   .1968555   .0501932     3.92   0.000     .0984787    .2952324
   ageXillw2 |   .0233836   .0127678     1.83   0.067    -.0016408     .048408
         age |   .0063243   .0075384     0.84   0.402    -.0084507    .0210993
       illw2 |  -1.134791   .6961081    -1.63   0.103    -2.499138    .2295553
       _cons |  -1.667851   .3743004    -4.46   0.000    -2.401466   -.9342355
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)
```

```
292 . title4 "only age is a possible mediator for men when b4 b40 and age are toge
    > ther"
```

only age is a possible mediator for men when b4 b40 and age are together

```
293 .
294 .
295 . title4 "interaction of ageXillw2 impacts paid employment as male mediator an
    > d moderator"
```

interaction of ageXillw2 impacts paid employment as male mediator and moderato
> r

```
296 . glm ageXillw2 illw2 age avgcumdosew2 if gender==1, fam(gaussian) link(identi
    > ty)

Iteration 0:   log likelihood = -1109.6595

Generalized linear models                         No. of obs      =        340
Optimization     : ML                             Residual df     =        336
                                                  Scale parameter =    40.5026
Deviance         =  13608.87389                   (1/df) Deviance =    40.5026
Pearson          =  13608.87389                   (1/df) Pearson  =    40.5026

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   6.550938
Log likelihood   = -1109.659496                   BIC             =   11650.35
```

ageXillw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
illw2	53.11213	.5991873	88.64	0.000	51.93774	54.28651
age	.2512225	.0292235	8.60	0.000	.1939455	.3084996
avgcumdosew2	.0156969	.1390398	0.11	0.910	-.2568161	.2882098
_cons	-11.84953	1.441655	-8.22	0.000	-14.67513	-9.023941

```
297 . glm hp2work ageXillw2 age illw2 avgcumdosew2 if gender==1, fam(binomial) irl
    > s ///
    >    scale(dev) link(probit)

    Iteration 1:   deviance =  322.7831
    Iteration 2:   deviance =  322.5045
    Iteration 3:   deviance =  322.5038
    Iteration 4:   deviance =  322.5038
    Iteration 5:   deviance =  322.5038

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       335
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  322.5038421                    (1/df) Deviance =   .962698
    Pearson          =  337.2279798                    (1/df) Pearson  =  1.006651

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1630.193

    ------------------------------------------------------------------------------
                 |                 EIM
         hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
       ageXillw2 |   .0278044   .0129945     2.14   0.032     .0023357    .0532732
             age |   .0127618   .0073249     1.74   0.081    -.0015948    .0271183
           illw2 |  -1.215538   .7144847    -1.70   0.089    -2.615902    .1848265
    avgcumdosew2 |   .0031971     .02854     0.11   0.911    -.0527403    .0591346
           _cons |  -1.579985   .3683777    -4.29   0.000    -2.301992   -.8579781
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

298 .
299 . scalar WkMedMw2 = "age ageXillw2"

300 . * moderate negative correlation between bf4 and age generates ///
    > *    annihilation of effect among men in wave 2"
```

```
301 .
302 .
303 . title4 "Testing possible female paid employment mediators for paid employmen
> t in wave 2"
-------------------------------------------------------------------------------

Testing possible female paid employment mediators for paid employment in wave
> 2
-------------------------------------------------------------------------------

304 .
305 . title4 "Test of age as possible female mediator in wave 2"
-------------------------------------------------------------------------------

Test of age as possible female mediator in wave 2
-------------------------------------------------------------------------------

306 . glm age avgcumdosew2 if gender==2, fam(gauss) link(identity)

Iteration 0:   log likelihood = -1406.9403

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =  136.9184
Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  7.762756
Log likelihood   = -1406.940271                    BIC             =  47299.65

------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
       _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
------------------------------------------------------------------------------
```

```
307 . glm hp2work age if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  372.7391
    Iteration 2:   deviance =  372.3711
    Iteration 3:   deviance =  372.3711
    Iteration 4:   deviance =  372.3711

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  372.3710546                    (1/df) Deviance =  1.031499
    Pearson          =  375.1783727                    (1/df) Pearson  =  1.039275

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1755.508

    ------------------------------------------------------------------------------
                 |                 EIM
         hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             age |   .0398718   .0066503     6.00   0.000     .0268375     .052906
           _cons |  -2.722762   .3594297    -7.58   0.000    -3.427231   -2.018292
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

308 . title4 "age can be a wave 2 mediator for women with hp2work "
    ------------------------------------------------------------------------------
    age can be a wave 2 mediator for women with hp2work
    ------------------------------------------------------------------------------

309 .
310 .
311 . title4 "Test of b40 as female mediator of paid employment in wave 2"
    ------------------------------------------------------------------------------
    Test of b40 as female mediator of paid employment in wave 2
    ------------------------------------------------------------------------------
```

```
312 . glm bf40 age avgcumdosew2 if gender==2, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -812.90018

    Generalized linear models                          No. of obs      =       363
    Optimization     : ML                              Residual df     =       360
                                                       Scale parameter =  5.202871
    Deviance         =  1873.033605                    (1/df) Deviance =  5.202871
    Pearson          =  1873.033605                    (1/df) Pearson  =  5.202871

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  4.495318
    Log likelihood   =  -812.900181                    BIC             = -248.9514
```

bf40	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0344949	.0102598	3.36	0.001	.0143862	.0546037
avgcumdosew2	.1276677	.0881819	1.45	0.148	-.0451657	.3005011
_cons	1.318795	.5213154	2.53	0.011	.2970355	2.340554

```
313 . glm hp2work bf40  age if gender==2, fam(binomial) link(probit) irls scale(de
    > v)

    Iteration 1:   deviance =  370.0322
    Iteration 2:   deviance =  369.4792
    Iteration 3:   deviance =  369.4783
    Iteration 4:   deviance =  369.4783

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       360
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  369.4782806                    (1/df) Deviance =  1.026329
    Pearson          =  367.3661843                    (1/df) Pearson  =  1.020462

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1752.507
```

hp2work	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf40	**.0541122**	**.0322636**	**1.68**	**0.094**	**-.0091233**	**.1173476**
age	**.0384233**	**.0067268**	**5.71**	**0.000**	**.025239**	**.0516076**
_cons	**-2.8289**	**.3651989**	**-7.75**	**0.000**	**-3.544677**	**-2.113123**

(Standard errors scaled using square root of deviance-based dispersion.)

314 . title4 "b40 with age is not likely to be a wv 2 mediator for women"

b40 with age is not likely to be a wv 2 mediator for women

315 .
316 .
317 . title4 "bf40 Test of female mediation of paid employment in wave 2"

bf40 Test of female mediation of paid employment in wave 2

318 . glm bf40 avgcumdosew2 if gender==2, fam(gauss) link(identity)

```
Iteration 0:   log likelihood = -818.51169

Generalized linear models                         No. of obs      =        363
Optimization     : ML                             Residual df     =        361
                                                  Scale parameter =   5.351378
Deviance         =  1931.847477                   (1/df) Deviance =   5.351378
Pearson          =  1931.847477                   (1/df) Pearson  =   5.351378

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   4.520726
Log likelihood   = -818.5116931                   BIC             =  -196.0319
```

bf40	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**.1794903**	**.0880548**	**2.04**	**0.042**	**.0069061**	**.3520745**
_cons	**3.004543**	**.1447786**	**20.75**	**0.000**	**2.720783**	**3.288304**

```
319 . glm hp2work bf40 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  406.4865
    Iteration 2:   deviance =  406.0549
    Iteration 3:   deviance =  406.0547
    Iteration 4:   deviance =  406.0547

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  406.0547444                    (1/df) Deviance =  1.124805
    Pearson          =  360.1809662                    (1/df) Pearson  =  .9977312

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1721.825

    ------------------------------------------------------------------------------
                 |                 EIM
         hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
            bf40 |    .080565   .0316866     2.54   0.011     .0184603    .1426696
           _cons |   -.921639   .1303745    -7.07   0.000    -1.177168   -.6661097
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

320 . title4 "bf40 alone is a mediator for women"
    ------------------------------------------------------------------------------
    bf40 alone is a mediator for women
    ------------------------------------------------------------------------------

321 .
322 .
323 . title "bf4 Test of female mediation of paid employment in wave 2"


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****     bf4 Test of female mediation of paid employment in wave 2       ****
    > *
    *****                                                                     ****
    > *
```

```
*****                                                                       ****
> *
*****                                              17 Jun 2012    10:04:59  ****
> *
********************************************************************************
> *
********************************************************************************
> *
```

```
324 . glm bf4 avgcumdosew2 if gender==2, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -1109.0983

    Generalized linear models                          No. of obs      =       363
    Optimization     : ML                              Residual df     =       361
                                                       Scale parameter =  26.53281
    Deviance         =  9578.344971                    (1/df) Deviance =  26.53281
    Pearson          =  9578.344971                    (1/df) Pearson  =  26.53281

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  6.121754
    Log likelihood   = -1109.098281                    BIC             =  7450.466

    ------------------------------------------------------------------------------
                 |                 OIM
             bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   -.595012   .1960703    -3.03   0.002    -.9793027   -.2107212
           _cons |   11.02048   .3223763    34.19   0.000     10.38863    11.65232
    ------------------------------------------------------------------------------

325 . glm hp2work bf4 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  370.9717
    Iteration 2:   deviance =  370.7179
    Iteration 3:   deviance =  370.7176
    Iteration 4:   deviance =  370.7176

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  370.7176349                    (1/df) Deviance =  1.026919
    Pearson          =  356.8979308                    (1/df) Pearson  =  .9886369
```

```
Variance function: V(u) = u*(1-u)                    [Bernoulli]
Link function    : g(u) = invnorm(u)                 [Probit]

                                                     BIC             = -1757.162
```

hp2work	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
bf4	-.090794	.0144985	-6.26	0.000	-.1192106	-.0623775
_cons	.2257867	.1560342	1.45	0.148	-.0800347	.531608

```
(Standard errors scaled using square root of deviance-based dispersion.)

326 . title4 "bf4 alone is a mediator for women"

bf4 alone is a mediator for women


327 .
328 .
329 .
330 . title "Test of female mediation of paid employment in wave 2"


*****************************************************************************
> *
*****************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****        Test of female mediation of paid employment in wave 2       ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                        17 Jun 2012    10:05:02     ****
> *
*****************************************************************************
> *
*****************************************************************************
> *
```

```
331 . glm illw2 avgcumdosew2 if gender==2, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -463.51524

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        361
                                                       Scale parameter =    .756881
    Deviance         =  273.2340487                    (1/df) Deviance =    .756881
    Pearson          =  273.2340487                    (1/df) Pearson  =    .756881

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   2.564822
    Log likelihood   = -463.5152411                    BIC             =  -1854.645

    ------------------------------------------------------------------------------
                 |                 OIM
           illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   .1249912   .0331157     3.77   0.000     .0600856    .1898968
           _cons |    .301285   .0544484     5.53   0.000      .194568    .4080019
    ------------------------------------------------------------------------------

332 . glm hp2work illw2 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  405.7435
    Iteration 2:   deviance =  405.3085
    Iteration 3:   deviance =  405.3081
    Iteration 4:   deviance =  405.3081
    Iteration 5:   deviance =  405.3081

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        361
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  405.3080692                    (1/df) Deviance =   1.122737
    Pearson          =  363.1923247                    (1/df) Pearson  =   1.006073

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1722.571
```

hp2work	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
illw2	**.2093544**	**.0854065**	**2.45**	**0.014**	**.0419606**	**.3767481**
_cons	**-.7522712**	**.0853534**	**-8.81**	**0.000**	**-.9195607**	**-.5849817**

```
(Standard errors scaled using square root of deviance-based dispersion.)

333 . title4 "illw2 alone is a mediator for women"

illw2 alone is a mediator for women


334 .
335 .
336 .
337 .
338 . title "Test of female mediation of paid employment in wave 2"


*******************************************************************************
> *
*******************************************************************************
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****        Test of female mediation of paid employment in wave 2         ****
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****                                         17 Jun 2012    10:05:04      ****
> *
*******************************************************************************
> *
*******************************************************************************
> *
```

```
339 . mvreg bf4 age bf40 = avgcumdosew2 if gender==2

Equation          Obs  Parms        RMSE    "R-sq"          F        P
----------------------------------------------------------------------
bf4               363      2    5.151001    0.0249   9.209323   0.0026
age               363      2    11.70121    0.0306   11.37694   0.0008
bf40              363      2    2.313305    0.0114   4.155047   0.0422

------------------------------------------------------------------------------
             |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
bf4          |
avgcumdosew2 |   -.595012   .1960703    -3.03   0.003    -.9805954   -.2094285
       _cons |   11.02048   .3223763    34.19   0.000     10.38651    11.65445
-------------+----------------------------------------------------------------
age          |
avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6264181    2.378231
       _cons |   48.86944   .7323225    66.73   0.000     47.42929     50.3096
-------------+----------------------------------------------------------------
bf40         |
avgcumdosew2 |   .1794903   .0880548     2.04   0.042     .0063255    .3526551
       _cons |   3.004543   .1447786    20.75   0.000     2.719828    3.289259
------------------------------------------------------------------------------

340 . glm hp2work bf4 age bf40 if gender==2, fam(binomial) link(probit) irls ///
    >   scale(dev)

Iteration 1:   deviance =  354.2404
Iteration 2:   deviance =  353.2021
Iteration 3:   deviance =  353.1978
Iteration 4:   deviance =  353.1978
Iteration 5:   deviance =  353.1978

Generalized linear models                          No. of obs      =       363
Optimization     : MQL Fisher scoring              Residual df     =       359
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  353.1977844                    (1/df) Deviance =  .9838378
Pearson          =  373.3187421                    (1/df) Pearson  =  1.039885

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1762.893
```

hp2work	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
bf4	**-.0639211**	**.0157071**	**-4.07**	**0.000**	**-.0947065**	**-.0331358**
age	**.0282268**	**.007046**	**4.01**	**0.000**	**.0144169**	**.0420367**
bf40	**.0293818**	**.0331211**	**0.89**	**0.375**	**-.0355344**	**.0942981**
_cons	**-1.597741**	**.4643893**	**-3.44**	**0.001**	**-2.507928**	**-.6875549**

(Standard errors scaled using square root of deviance-based dispersion.)

```
341 . title4 "When bf4 bf40 & age are together" ///
    >  "only age & b4 are a wave 2 mediators for women"
```

When bf4 bf40 & age are together

```
342 .
343 .
344 .
345 .
346 . title "Test of female mediation of paid employment in wave 2"
```

```
********************************************************************************
> *
********************************************************************************
> *
*****                                                                       ****
> *
*****                                                                       ****
> *
*****         Test of female mediation of paid employment in wave 2         ****
> *
*****                                                                       ****
> *
*****                                                                       ****
> *
*****                                              17 Jun 2012    10:05:07  ****
> *
********************************************************************************
> *
********************************************************************************
> *
```

```
347 . mvreg bf4 age bf40 illw2 = avgcumdosew2 if gender==2

    Equation          Obs  Parms        RMSE    "R-sq"          F        P
    ----------------------------------------------------------------------
    bf4               363      2    5.151001    0.0249   9.209323   0.0026
    age               363      2    11.70121    0.0306   11.37694   0.0008
    bf40              363      2    2.313305    0.0114   4.155047   0.0422
    illw2             363      2    .8699891    0.0380   14.24594   0.0002

    ------------------------------------------------------------------------------
                 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    bf4          |
    avgcumdosew2 |   -.595012   .1960703    -3.03   0.003    -.9805954   -.2094285
           _cons |   11.02048   .3223763    34.19   0.000     10.38651    11.65445
    -------------+----------------------------------------------------------------
    age          |
    avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6264181    2.378231
           _cons |   48.86944   .7323225    66.73   0.000     47.42929     50.3096
    -------------+----------------------------------------------------------------
    bf40         |
    avgcumdosew2 |   .1794903   .0880548     2.04   0.042     .0063255    .3526551
           _cons |   3.004543   .1447786    20.75   0.000     2.719828    3.289259
    -------------+----------------------------------------------------------------
    illw2        |
    avgcumdosew2 |   .1249912   .0331157     3.77   0.000     .0598673    .1901152
           _cons |    .301285   .0544484     5.53   0.000     .1942091    .4083609
    ------------------------------------------------------------------------------

348 . glm hp2work bf4 age bf40 illw2 if gender==2, fam(binomial) ///
    >    link(probit) irls scale(dev)

    Iteration 1:   deviance =  353.9708
    Iteration 2:   deviance =  352.9328
    Iteration 3:   deviance =  352.9282
    Iteration 4:   deviance =  352.9282
    Iteration 5:   deviance =  352.9282

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       358
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =   352.928242                    (1/df) Deviance =  .9858331
    Pearson          =  374.7035801                    (1/df) Pearson  =  1.046658

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1757.268
```

```
------------------------------------------------------------------------------
             |                 EIM
     hp2work |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf4 |  -.0619013   .0162545    -3.81   0.000    -.0937595   -.0300431
         age |   .0281218   .0070538     3.99   0.000     .0142966    .0419469
        bf40 |   .0270841   .0335369     0.81   0.419     -.038647    .0928153
       illw2 |   .0420195   .0835799     0.50   0.615    -.1217941    .2058332
       _cons |  -1.624207   .4693912    -3.46   0.001    -2.544197   -.7042168
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

349 . qui: {
When all are together only age and b4 are a wave 2 mediators for women

350 .
351 .
352 . scalar wkMedMw2 = "age bf4"

353 .
354 . scalar SigDoseWkMw2 = "no"

355 . scalar MainEffwkMw2 = "age"

356 . scalar MainEffwkFw2 = "age"

357 . scalar wkMedFw2 = "age b4"

358 .
359 .
360 . title4 "*---1.- Summary matrix construction Paid employment partition: first
>  two rows"
------------------------------------------------------------------------------
*---1.- Summary matrix construction Paid employment partition: first two rows
------------------------------------------------------------------------------

361 .
```

```
362 .      matrix define wkMw2 = J(1,8, 0)

363 .          matrix define  wkFw2 = J(1,8, 0)

364 . matrix colnames  wkMw2=  hypnum ptnum wave gender medsig numMAsig numModsig
    > numMed

365 . matrix colnames  wkFw2=  hypnum ptnum wave gender medsig numMAsig numModsig
    > numMed

366 .      matrix rownames  wkMw2 = workMw2

367 .      matrix rownames  wkFw2 = workFw2

368 .          matrix define  wkMw2= (1, 2, 2, 1, 0 ,2,  0  , 2 )

369 .          matrix define  wkFw2= (1, 2, 2, 2, 0, 1,  0  , 2 )

370 .
371 .          matrix define H1pt2w2 = ( wkMw2 \  wkFw2)

372 .      matrix colnames H1pt2w2 =  hypnum ptnum wave  medsig numMAsig numModsig
    > numMed

373 .      matrix rownames H1pt2w2 =  wkMw2 wkFw2

374 .      matlist H1pt2w2

                 |     hypnum      ptnum       wave     medsig   numMAsig  numModsi
    > g     numMed      numMed
    -------------+-------------------------------------------------------------------
    > -------------------------
           wkMw2 |          1          2          2          1          0
    > 2          0          2
           wkFw2 |          1          2          2          2          0
    > 1          0          2
```

```
375 .
376 .
377 . scalar list
    MainEffwkFw2 = age
    MainEffwkMw2 = age
    inthobMedMw2 = age
     inthobMw2 = age
    sxlifeMedMw2 = age illw2
    SigDoseSxlifeFw2 = no
    MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
    PrbfmhmModMw2 = none
    MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
    MainEffPrbsocMw2 = age radhlw2 shjobw2
    MainEffhmcrFw2 = age
    hmcrMedFw2 = age bf4
    hmcrModMw2 = none
    MainEffhmcrMw2 = age
      wkMedFw2 = age b4
      wkMedMw2 = age bf4
    MainEffVactnMw2 = age radhlw2
    MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
    MainEffPrbfmhmMw2 = bf4 bf6 bf7
    ProbsocMedFw2 = age bf4 radhlw2
    hmcareMedFw2 = age bf4
     WkhmcrMw2 = age b4
    MainEffhmcrw2 = age
    hmcrModFw2 = none
    SigDoseHmcrFw2 = yes
    NumhmcrModMw2 = none
    SigDosehmcrMw2 = no
    SigdosehmcrFw2 = yes
    hmcrMedMw2 = age ageXillw2
    SigDosehmcrFw2 = no
    MainEffhmcareMw2 = age
      WkMedMw2 = age ageXillw2
      wkMedFw3 = radhlw3 age ageXillw3 bf40 bf4m bf1
    VactnMedFw2 = age illw2 radhlw2
    VactnMedMw2 = age illw2
    VacatnModFw2 = none
    MainEffVactnFw2 = age radhlw2 bf7m
    SigDoseVactnFw2 = no
    VactnModMw2 = none
    vactnModMw2 = none
    SigDoseVactnMw2 = no
    inthobMedFw2 = age bf4 illw2 bf4m
    InthbModFw2 = none
    MainEffInthbFw2 = age radhlw2 bf4
    SigdoseInthbFw2 = no
    InthbModMw2 = none
```

MainEffInthbMw2 = **age radhlw2 shfamw2**
SigDoseInthbMw2 = **no**
MainEffMw2 = **radhlw2 bf4 bf40**
SigdoseMEinthob = **no**
sxlifeMedFw2 = **age illw2 radhlw2 bf4 bf4m**
SxLifeModFw2 = **no**
sxlifeModFw2 = **none**
sxlifeModMw2 = **none**
SigDosesxlifeMw2 = **no**
PrbfmhmMedFw2 = **age bf4**
PrbfmhmMedMw2 = **age**
PrbfmhmModFw2 = **none**
MainEffPrbfmhmFw2 = **age bf4 bf40**
SigDosePrbfmhmFw2 = **no**
PrbfmhmModw2 = **none**
SigDosePrbfmhmMw2 = **no**
SigDosePrbfhmMw2 = **no**
MainEffPrbfhmMw2 = **bf4 bf6 bf7**
ProbsocMedMw2 = **age**
ProbsocModFw2 = **none**
SigDoseProbsocFw2 = **yes**
ProbSocModMw2 = **none**
SigDoseProbsocMw2 = **no**
PrbsocModMw2 = **none**
SigdoseMw2 = **none**
hmcareMedMw2 = **age**
hmcareModFw2 = **none**
MainEffhmcarew2 = **age**
SigdoseHmcareFw2 = **no**
hmcareModMw2 = **none**
SigDoseHmcareMw2 = **no**
NameMedMw2 = **age ageXillw2**
NumModMw2 = **none**
SigDosehmcareMw2 = **no**
SigDoseWKMw2 = **no**
WkMedFw2 = **age bf4**
WkModFw2 = **none**
WKModMw2 = **none**
SigDoseWkMw2 = **no**
SigDoseWkFw2 = **no**
SigDoseFw2 = **no**
wkModFw2 = **none**
wkModMw2 = **none**
VactnMedFw3 = **age illw3 radhlw3**
VactnMedMw3 = **age illw3**
VacatnModFw3 = **none**
MainEffVactnFw3 = **age radhlw3 deaw3**
SigDoseVactnFw3 = **no**
vactnModMw3 = **none**

```
MainEffVactnMw3 = age bf7m radhlw3
SigDoseVactnMw3 = no
sxLifeMedFw3 = age bf4 bf4m
sxLifeMedMw3 = age illw3
InthbModFw3 = none
MainEffInthbFw3 = age radhlw3 bf4
SigdoseInthbFw3 = no
  InthbMw3 = none
MainEffInthbMw3 = age radhlw3 shfamw3
SigDoseInthbMw3 = no
sxlifeMedFw3 = age illw3 radhlw3 bf4 bf4m
sxlifeMedMw3 = age illw3
sxlifeModFw3 = none
MainEffsxlifeFw3 = age radhlw3 bf4 bf4m shrelaw3 shfamw3
SigDoseSxlifeFw3 = no
sxlifeModMw3 = none
SigDosesxlifeMw3 = no
MainEffsxlifeMw3 = age bf4 illw3 radhlw3
PrbfmhmMedFw3 = age bf4
PrbfmhmMedMw3 = age
PrbfmhmModFw3 = none
MainEffPrbfmhmFw3 = age bf4 bf40
SigDosePrbfmhmFw3 = no
PrbfmhmModw3 = none
SigDosePrbfmhmMw3 = no
SigDosePrbfhmMw3 = no
MainEffPrbfhmMw3 = bf1 bf4 dvcew3 bf7m
ProbsocMedFw3 = age radhlw3
ProbsocMedMw3 = age
ProbsocModFw3 = none
MainEffProbSocFw3 = age radhlw3 illw3 Shrelaw3 avgcumodsew3
SigDoseProbsocFw3 = yes
ProbSocModMw3 = none
SigDoseProbsocMw3 = no
MainEffPrbsocMw3 = age radhlw3 shjobw3
hmcareMedFw3 = age illw3
hmcareMedMw3 = age illw3
hmcareModFw3 = none
SigdoseHmcareFw3 = no
hmcareModMw3 = none
MainEffhmcareMw3 = none
SigDoseHmcareMw3 = no
  wkMedMw3 = bf8 age illw3 ageXillw3
  wkModFw3 = none
  wkModMw3 = none
MainEffwkFw3 = age
MainEffwkMw3 = workM: age  bf8  illw3  shjobw3
SigDoseWKMw3 = no
SigDoseWkFw3 = no
```

```
378 . * moderator construction
379 . * none ussed because basic dose work relationship washes out
380 .
381 . title "2. Hyp 1 pt 2 wave 2 male dose Hp2hmcare impact explored"


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****      2. Hyp 1 pt 2 wave 2 male dose Hp2hmcare impact explored       ****
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****                                              17 Jun 2012    10:05:10  ****
    > *
    ******************************************************************************
    > *
    ******************************************************************************
    > *



382 .
383 . * -------  testing male and female moderators-wave 2 for hmcare-------------
    > ----
384 .
385 . cap gen hp2hmcare=HP2hmcare

386 .
```

```
387 . forvalues j = 2/2 {
  2. set more off
  3. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  4. di as input "For females hp2hmcare on Wave 2 with dose ns"
  5.         des  age occ1w`j'-occ8w`j' inc1w`j'-inc4w`j' avgcumdosew`j' bf8 /
> //
>            marrw`j'1-marrw`j'6  `w2bf' radhlw`j'
  6.         sw, pr(.1): logistic hp2hmcare marrw`j'3-marrw`j'6 age  havmilsq
> ///
>                 avgcumdosew1 bf8 illw`j' shjobw`j' suprtw`j' if gender==1, c
> oef
  7.         estat gof
  8.         estat class
  9.         fitstat
 10.         }
For females hp2hmcare on Wave 2 with dose ns

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
age             double %8.0g                * Respondent's age
occ1w2          double %15.0g      LABJ       profess executive administration
                                                in 1996
occ2w2          double %15.0g      LABJ       technical sales admin support in
                                                1996
occ3w2          double %15.0g      LABJ       service occup protective
                                                services in 1996
occ4w2          double %15.0g      LABJ       precision prod mechan craft
                                                construction in 1996
occ5w2          double %15.0g      LABJ       factory laborer machinist transp
                                                cleaner in 1996
occ6w2          double %15.0g      LABJ       farming agricul forestry fishing
                                                trapping logging in 1996
occ7w2          double %15.0g      LABJ       homemaking caregiving in 1996
occ8w2          double %15.0g      LABJ       student in 1996
inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                basic neccessities in 1996
inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                basic neccessities in 1996
inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                plus extra purchases/savings
                                                in 1996
inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                afford luxury items in 1996
avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                for wave 2
bf8             float  %9.0g                  bf8 = max(0, radtlw3 - 40) *
                                                bf5m
marrw21         byte   %8.0g                  marrw2==1. single
```

```
marrw22          byte   %8.0g                  marrw2==2. cohabitating
marrw23          byte   %8.0g                  marrw2==3. married
marrw24          byte   %8.0g                  marrw2==4. separated
marrw25          byte   %8.0g                  marrw2==5. divorced
marrw26          byte   %8.0g                  marrw2==6. widowed
bf1              float  %9.0g                  bf1 = max(0, kzchorn - 40)
bf4              float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf6              float  %9.0g                  bf6= max(0, radtlw2 - 10)
bf7              float  %9.0g                  bf7= max(0, 10 - radtlw2)
bf14             float  %9.0g                  bf14= max(0, radw2 - 10) * bf12
bf15             float  %9.0g                  bf15= max(0, 10 - radw2) * bf12
bf40             float  %9.0g                  bf40 = max(0, icdxcnt -
                                                 1.01635E-007)
radhlw2          double %8.0g                  how much believed personal
                                                 health is affected by
                                                 radiation in 1996

                      begin with full model
p = 0.7326 >= 0.1000  removing marrw25
p = 0.6899 >= 0.1000  removing avgcumdosew1
p = 0.5598 >= 0.1000  removing marrw24
p = 0.5279 >= 0.1000  removing havmilsq
p = 0.4308 >= 0.1000  removing suprtw2
p = 0.3812 >= 0.1000  removing bf8
p = 0.3963 >= 0.1000  removing marrw26
p = 0.1763 >= 0.1000  removing shjobw2
p = 0.2257 >= 0.1000  removing marrw23

Logistic regression                               Number of obs   =        340
                                                  LR chi2(2)      =      28.54
                                                  Prob > chi2     =     0.0000
Log likelihood = -158.60117                       Pseudo R2       =     0.0826
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0538093	.0119121	4.52	0.000	.030462	.0771566
illw2	.347449	.2097345	1.66	0.098	-.063623	.7585211
_cons	-4.244759	.6492495	-6.54	0.000	-5.517264	-2.972253

Logistic model for hp2hmcare, goodness-of-fit test

```
       number of observations =       340
 number of covariate patterns =        91
             Pearson chi2(88) =        90.18
                  Prob > chi2 =         0.4155
```

Logistic model for hp2hmcare

Classified	True D	True ~D	Total
+	**3**	**2**	**5**
-	**67**	**268**	**335**
Total	**70**	**270**	**340**

Classified + if predicted Pr(D) >= .5
True D defined as hp2hmcare != 0

Sensitivity	Pr(+| D)	**4.29%**
Specificity	Pr(-|~D)	**99.26%**
Positive predictive value	Pr(D| +)	**60.00%**
Negative predictive value	Pr(~D| -)	**80.00%**
False + rate for true ~D	Pr(+|~D)	**0.74%**
False - rate for true D	Pr(-| D)	**95.71%**
False + rate for classified +	Pr(~D| +)	**40.00%**
False - rate for classified -	Pr(D| -)	**20.00%**
Correctly classified		**79.71%**

Measures of Fit for **logistic** of **hp2hmcare**

Log-Lik Intercept Only:	**-172.873**	Log-Lik Full Model:	**-158.601**
D(337):	**317.202**	LR(2):	**28.543**
		Prob > LR:	**0.000**
McFadden's R2:	**0.083**	McFadden's Adj R2:	**0.065**
Maximum Likelihood R2:	**0.081**	Cragg & Uhler's R2:	**0.126**
McKelvey and Zavoina's R2:	**0.140**	Efron's R2:	**0.094**
Variance of y*:	**3.826**	Variance of error:	**3.290**
Count R2:	**0.797**	Adj Count R2:	**0.014**
AIC:	**0.951**	AIC*n:	**323.202**
BIC:	**-1647.152**	BIC':	**-16.886**

```
388 .
389 . scalar SigDosehmcrMw2 = "no"

390 . scalar MainEffhmcrMw2 = "age"

391 . scalar hmcrModMw2 = "none"

392 .
393 .
394 .
395 . title4 "Trimmed female Hp2hmcare moderator model"
    ──────────────────────────────────────────────────────────────────────────────
    Trimmed female Hp2hmcare moderator model
    ──────────────────────────────────────────────────────────────────────────────

396 .
397 . cap gen ageXd2= age*avgcumdosew2

398 .
399 . forvalues j = 2/2 {
      2. set more off
      3. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
      4. di as input "For females HP2hmcare on Wave 2 with dose ns"
      5.         des  age  avgcumdosew`j' ///
    >            marrw`j'1-marrw`j'6  `w2bf' radhlw`j'
      6.         sw, pr(.1): logistic hp2hmcare marrw`j'3-marrw`j'6 age  havmilsq
    > ///
    >                 avgcumdosew1 illw`j' ageXd2 if gender==2, coef
      7.         estat gof
      8.         estat class
      9.         fitstat
     10.         }
    For females HP2hmcare on Wave 2 with dose ns

                  storage  display     value
    variable name   type   format      label      variable label
    ──────────────────────────────────────────────────────────────────────────────
    age             double %8.0g                * Respondent's age
    avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                    for wave 2
    marrw21         byte   %8.0g                  marrw2==1. single
    marrw22         byte   %8.0g                  marrw2==2. cohabitating
    marrw23         byte   %8.0g                  marrw2==3. married
    marrw24         byte   %8.0g                  marrw2==4. separated
    marrw25         byte   %8.0g                  marrw2==5. divorced
    marrw26         byte   %8.0g                  marrw2==6. widowed
    bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf6             float  %9.0g                  bf6= max(0, radtlw2 - 10)
```

```
bf7               float  %9.0g                bf7= max(0, 10 - radtlw2)
bf14              float  %9.0g                bf14= max(0, radw2 - 10) * bf12
bf15              float  %9.0g                bf15= max(0, 10 - radw2) * bf12
bf40              float  %9.0g                bf40 = max(0, icdxcnt -
                                                1.01635E-007)
radhlw2           double %8.0g                how much believed personal
                                                health is affected by
                                                radiation in 1996
note: marrw24 dropped because of estimability
note: o.marrw24 dropped because of estimability
note: 1 obs. dropped because of estimability
                      begin with full model
p = 0.9652 >= 0.1000  removing ageXd2
p = 0.9353 >= 0.1000  removing illw2
p = 0.8323 >= 0.1000  removing marrw26
p = 0.6372 >= 0.1000  removing marrw25
p = 0.4227 >= 0.1000  removing havmilsq
p = 0.1231 >= 0.1000  removing avgcumdosew1

Logistic regression                                 Number of obs   =        362
                                                    LR chi2(2)      =      80.23
                                                    Prob > chi2     =     0.0000
Log likelihood = -192.54484                         Pseudo R2       =     0.1724
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
marrw23	.8360757	.3218733	2.60	0.009	.2052155	1.466936
age	.0882987	.0122238	7.22	0.000	.0643404	.112257
_cons	-5.890481	.7226602	-8.15	0.000	-7.306869	-4.474093

Logistic model for hp2hmcare, goodness-of-fit test

```
       number of observations =       362
 number of covariate patterns =        86
             Pearson chi2(83) =        87.28
                  Prob > chi2 =         0.3526
```

Logistic model for hp2hmcare

Classified	True D	~D	Total
+	**60**	**30**	**90**
-	**64**	**208**	**272**
Total	**124**	**238**	**362**

Classified + if predicted Pr(D) >= .5
True D defined as hp2hmcare != 0

Sensitivity	Pr(+| D)	**48.39%**
Specificity	Pr(-|~D)	**87.39%**
Positive predictive value	Pr(D| +)	**66.67%**
Negative predictive value	Pr(~D| -)	**76.47%**
False + rate for true ~D	Pr(+|~D)	**12.61%**
False - rate for true D	Pr(-| D)	**51.61%**
False + rate for classified +	Pr(~D| +)	**33.33%**
False - rate for classified -	Pr(D| -)	**23.53%**
Correctly classified		**74.03%**

Measures of Fit for **logistic** of **hp2hmcare**

Log-Lik Intercept Only:	**-232.660**	Log-Lik Full Model:	**-192.545**
D(359):	**385.090**	LR(2):	**80.230**
		Prob > LR:	**0.000**
McFadden's R2:	**0.172**	McFadden's Adj R2:	**0.160**
Maximum Likelihood R2:	**0.199**	Cragg & Uhler's R2:	**0.275**
McKelvey and Zavoina's R2:	**0.301**	Efron's R2:	**0.213**
Variance of y*:	**4.706**	Variance of error:	**3.290**
Count R2:	**0.740**	Adj Count R2:	**0.242**
AIC:	**1.080**	AIC*n:	**391.090**
BIC:	**-1730.011**	BIC':	**-68.447**

```
. 
. qui {
  ------------------------------------------------------------------------------
  Caveat: We drop bf8 because it is dependent on a variable in a future wave.
  ------------------------------------------------------------------------------
  ------------------------------------------------------------------------------
  If it depended on a past wave variable we might have kept it.
  ------------------------------------------------------------------------------
  ------------------------------------------------------------------------------
  But when it is dependent on something that has not happened yet,
  ------------------------------------------------------------------------------
  ------------------------------------------------------------------------------
  it is too latent to consider in a wave specific analysis.
  ------------------------------------------------------------------------------

. des bf8 bf5m bf4m

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
bf8             float  %9.0g                  bf8 = max(0, radtlw3 - 40) *
                                                bf5m
bf5m            float  %9.0g                  bf5m = max(0, ecprw3 - 75) *
                                                bf4m
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)

. scalar SigDosehmcrFw2 = "no"

. scalar MainEffhmcrFw2 = "marrw23 age"

. 
. 
. title4 "home care wave 2 male mediator analysis"
  ------------------------------------------------------------------------------
  home care wave 2 male mediator analysis
  ------------------------------------------------------------------------------
```

```
408 .
409 . title4 "age is a possible male mediator of home care in wave 2"
    ────────────────────────────────────────────────────────────────────────────────
    age is a possible male mediator of home care in wave 2
    ────────────────────────────────────────────────────────────────────────────────


410 . glm age avgcumdosew2 if gender==1, fam(gaussian) link(identity)

    Iteration 0:   log likelihood = -1330.6004

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       338
                                                       Scale parameter =  147.6853
    Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
    Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  7.838826
    Log likelihood   =   -1330.6004                    BIC             =  47947.46

    ────────────────────────────────────────────────────────────────────────────────
                 │                 OIM
             age │      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ─────────────┼──────────────────────────────────────────────────────────────────
    avgcumdosew2 │   .5832314   .2635871     2.21   0.027     .0666101    1.099853
           _cons │   48.62133   .7061562    68.85   0.000     47.23729    50.00537
    ────────────────────────────────────────────────────────────────────────────────

411 . glm hp2hmcare age if gender==1, fam(binomial) irls scale(dev) link(probit)

    Iteration 1:   deviance =  320.8295
    Iteration 2:   deviance =  320.0337
    Iteration 3:   deviance =  320.0328
    Iteration 4:   deviance =  320.0328

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       338
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  320.0327771                    (1/df) Deviance =  .9468425
    Pearson          =   341.699231                    (1/df) Pearson  =  1.010944

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1650.151
```

```
------------------------------------------------------------------------------
             |                 EIM
   hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |    .032545   .0064212     5.07   0.000     .0199596    .0451304
       _cons |  -2.483665   .3435565    -7.23   0.000    -3.157023   -1.810306
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

412 .
413 . scalar hmcrMedMw2 = "age ageXillw2"

414 .
415 . di as input "age is a possible male mediator for home care in wave 2"
age is a possible male mediator for home care in wave 2

416 .
417 .
418 . di as input "age and illw2 as main effects together suppress illw2"
age and illw2 as main effects together suppress illw2

419 . glm illw2 age avgcumdosew2 if gender==1, family(gaussian) link(identity)

Iteration 0:   log likelihood = -294.89214

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       337
                                                   Scale parameter =  .3347555
Deviance         =   112.812617                    (1/df) Deviance =  .3347555
Pearson          =   112.812617                    (1/df) Pearson  =  .3347555

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  1.752307
Log likelihood   = -294.8921379                    BIC             = -1851.542

------------------------------------------------------------------------------
             |                 OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |    .010896   .0025896     4.21   0.000     .0058205    .0159716
avgcumdosew2 |   .0021874   .0126399     0.17   0.863    -.0225863    .0269611
       _cons |  -.2556434   .1303222    -1.96   0.050    -.5110702   -.0002165
------------------------------------------------------------------------------
```

```
420 . glm hp2hmcare illw2 age  if gender==1, family(binomial) irls scale(dev) link
    > (probit)

    Iteration 1:   deviance =  318.4593
    Iteration 2:   deviance =  317.6467
    Iteration 3:   deviance =  317.6458
    Iteration 4:   deviance =  317.6458

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       337
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  317.6458464                    (1/df) Deviance =  .9425693
    Pearson          =  345.1774401                    (1/df) Pearson  =  1.024265

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1646.709
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
illw2	.1994222	.1221622	1.63	0.103	-.0400114	.4388557
age	.0303611	.0065398	4.64	0.000	.0175433	.043179
_cons	-2.436578	.3445976	-7.07	0.000	-3.111977	-1.761179

```
    (Standard errors scaled using square root of deviance-based dispersion.)

421 .
422 .
423 . di as input "Interaction of age and wave 2 illness for males is mediator-mod
    > erator on hmcare"
    Interaction of age and wave 2 illness for males is mediator-moderator on hmcar
    > e

424 .
```

```
425 . cap gen ageXillw2 = age*illw2

426 . glm illw2 avgcumdosew2 if gender==1, family(gaussian) link(identity)

    Iteration 0:   log likelihood = -303.59609

    Generalized linear models                          No. of obs      =        340
    Optimization     : ML                              Residual df     =        338
                                                       Scale parameter =   .3512988
    Deviance         =  118.7390083                    (1/df) Deviance =   .3512988
    Pearson          =  118.7390083                    (1/df) Pearson  =   .3512988

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   1.797624
    Log likelihood   = -303.5960853                    BIC             =  -1851.445

    ------------------------------------------------------------------------------
                 |                 OIM
           illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   .0085423   .0128556     0.66   0.506    -.0166543    .0337389
           _cons |   .2741359   .0344406     7.96   0.000     .2066336    .3416382
    ------------------------------------------------------------------------------

427 . glm hp2hmcare illw2 avgcumdosew2 ageXillw2 if gender==1, family(binomial) //
    > /
    >     irls scale(dev) link(probit)

    Iteration 1:   deviance =  325.2943
    Iteration 2:   deviance =  325.0754
    Iteration 3:   deviance =  325.0739
    Iteration 4:   deviance =  325.0739
    Iteration 5:   deviance =  325.0739

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        336
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  325.0738987                    (1/df) Deviance =   .9674818
    Pearson          =  337.8592784                    (1/df) Pearson  =   1.005534

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1633.452
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
illw2	**-2.019327**	**.7153941**	**-2.82**	**0.005**	**-3.421474**	**-.6171808**
avgcumdosew2	**-.000217**	**.0298223**	**-0.01**	**0.994**	**-.0586676**	**.0582336**
ageXillw2	**.0422954**	**.0126323**	**3.35**	**0.001**	**.0175365**	**.0670543**
_cons	**-.9410134**	**.0916093**	**-10.27**	**0.000**	**-1.120564**	**-.7614625**

```
(Standard errors scaled using square root of deviance-based dispersion.)

428 .
429 .
430 .
431 . * Saving mediators as scalars for Dose=work relationship
432 . **** female mediators of dose-paid employment: radhlw2, age, bf40, bf4m, bf4
> , bf1
433 .
434 . scalar hmcrMedMw2 = "age ageXillw2"

435 . scalar hmcrMedFw2 = "radhlw2 age bf40 bf4m bf4 bf1"

436 .
437 .
438 .
439 . cap gen hp2vacatn = HP2vacatn

440 .
441 .
442 . title "2. H1 pt2 wave 2 Dose female moderator Homecare impact  "


******************************************************************************
> *
******************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****      2. H1 pt2 wave 2 Dose female moderator Homecare impact        ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                         17 Jun 2012    10:05:43    ****
> *
******************************************************************************
```

```
> *
*******************************************************************************
> *




443 .
444 .
445 . *  review of general model for men and women
446 .
447 . forvalues j = 2/2 {
  2.  set more off
  3.
448 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
>   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
  4.
449 .   foreach var in HP2hmcare  {
  5.
450 .   local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  6.    title  "chunk 3 H1 test pt 2 :Gender= `k'  model Wave =  `j' for `e(de
> pvar)' "
  7.                 di _skip(4)
  8.
451 .
452 .       xi: logistic `var' age i.educ occ1w`j'-occ8w`j' ///
>                 marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
> //
>                 radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
>                  deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' radhlw2 ///
>                 illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
> chrw`j' ///
>                  havmilsq if gender==2, coef  difficult iterate(50)
  9.                         estat class
 10.                         estat gof
 11.                         fitstat
 12.
453 . }
 13. }
```

variable name	storage type	display format	value label	variable label
age	double	%8.0g		* **Respondent's age**
educ1	byte	%8.0g		**educ==1. did not graduate high school**
educ2	byte	%8.0g		**educ==2. graduated high school**
educ3	byte	%8.0g		**educ==3. technical degree**
educ4	byte	%8.0g		**educ==4. did not finish college/bachelor's**
educ5	byte	%8.0g		**educ==5. graduated college/bachelor's**
educ6	byte	%8.0g		**educ==6. finished specialist/master's degree**
educ7	byte	%8.0g		**educ==7. doctor of science/phd**
marrw21	byte	%8.0g		**marrw2==1. single**
marrw22	byte	%8.0g		**marrw2==2. cohabitating**
marrw23	byte	%8.0g		**marrw2==3. married**
marrw24	byte	%8.0g		**marrw2==4. separated**
marrw25	byte	%8.0g		**marrw2==5. divorced**
marrw26	byte	%8.0g		**marrw2==6. widowed**
inc1w2	double	%15.0g	LABJ	**Income is not sufficient for basic neccessities in 1996**
inc2w2	double	%15.0g	LABJ	**Income is just sufficient for basic neccessities in 1996**
inc3w2	double	%15.0g	LABJ	**Income is sufficient for basics plus extra purchases/savings in 1996**
inc4w2	double	%15.0g	LABJ	**Income allows to comfortably afford luxury items in 1996**
bf1	float	%9.0g		**bf1 = max(0, kzchorn - 40)**
bf4	float	%9.0g		**bf4 = max(0, 24 - BSIsoma)**
bf9	float	%9.0g		**bf9= max(0, 30 - shhlw1)**
bf11	float	%9.0g		**bf11= max(0, 20 - sufamw1)**
bf4m	float	%9.0g		**bf4m = max(0, 32 - BSIsoma)**
bf15m	float	%9.0g		**bf15m= max(0, 1 - icdxcnt) * bf2**
bf30	float	%9.0g		**bf30 = max(0, neiw1 - 85) * bf20**
bf40	float	%9.0g		**bf40 = max(0, icdxcnt - 1.01635E-007)**

```
******************************************************************************
> *
******************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****   chunk 3 H1 test pt 2 :Gender=   model Wave =  2 for hp2hmcare     ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                        17 Jun 2012    10:05:43  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity

Logistic regression                               Number of obs   =        362
                                                  LR chi2(45)     =     176.34
                                                  Prob > chi2     =     0.0000
Log likelihood = -144.48759                       Pseudo R2       =     0.3790
```

HP2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0738943	.0179039	4.13	0.000	.0388033	.1089852
_Ieduc_2	-14.47538	1273.657	-0.01	0.991	-2510.798	2481.847
_Ieduc_3	-15.05547	1273.657	-0.01	0.991	-2511.378	2481.267
_Ieduc_4	-13.48341	1273.657	-0.01	0.992	-2509.806	2482.839
_Ieduc_5	-14.88762	1273.657	-0.01	0.991	-2511.21	2481.435
_Ieduc_6	-15.58826	1273.657	-0.01	0.990	-2511.911	2480.734
_Ieduc_7	-13.81171	1273.659	-0.01	0.991	-2510.137	2482.513
_Ieduc_8	0	(omitted)				
occ1w2	-2.359905	1.509597	-1.56	0.118	-5.318661	.5988504
occ2w2	-2.373759	1.546944	-1.53	0.125	-5.405713	.6581945
occ3w2	-1.535666	1.553674	-0.99	0.323	-4.58081	1.509479
occ4w2	-2.972204	1.655316	-1.80	0.073	-6.216564	.2721556

occ5w2	**-4.352791**	**1.883178**	**-2.31**	**0.021**	**-8.043752**	**-.6618289**
occ6w2	**-5.059677**	**2.021732**	**-2.50**	**0.012**	**-9.022199**	**-1.097155**
occ7w2	**-1.364295**	**1.545156**	**-0.88**	**0.377**	**-4.392746**	**1.664156**
occ8w2	**-.5789576**	**1.792303**	**-0.32**	**0.747**	**-4.091808**	**2.933892**
marrw21	**-.0690078**	**1.129464**	**-0.06**	**0.951**	**-2.282717**	**2.144702**
marrw22	**.7043443**	**1.44356**	**0.49**	**0.626**	**-2.124982**	**3.533671**
marrw23	**2.097285**	**.8281102**	**2.53**	**0.011**	**.4742186**	**3.720351**
marrw25	**.9609574**	**1.20757**	**0.80**	**0.426**	**-1.405836**	**3.327751**
marrw26	**0**	(omitted)				
inc1w2	**2.105274**	**1.594442**	**1.32**	**0.187**	**-1.019775**	**5.230323**
inc2w2	**3.407471**	**1.542788**	**2.21**	**0.027**	**.3836621**	**6.43128**
inc3w2	**2.870172**	**1.549672**	**1.85**	**0.064**	**-.1671285**	**5.907473**
inc4w2	**3.606463**	**1.894634**	**1.90**	**0.057**	**-.1069505**	**7.319876**
radhlw2	**-.0068123**	**.0061828**	**-1.10**	**0.271**	**-.0189302**	**.0053057**
havmil	**.0011484**	**.0030211**	**0.38**	**0.704**	**-.0047728**	**.0070696**
avgcumdosew2	**-.2667926**	**.1232968**	**-2.16**	**0.030**	**-.5084499**	**-.0251353**
bf1	**-.0183931**	**.0079003**	**-2.33**	**0.020**	**-.0338774**	**-.0029088**
bf4	**-.2337773**	**.0416245**	**-5.62**	**0.000**	**-.3153598**	**-.1521948**
bf6	**.0040038**	**.0067939**	**0.59**	**0.556**	**-.009312**	**.0173196**
bf7	**-.126659**	**.0709704**	**-1.78**	**0.074**	**-.2657584**	**.0124404**
bf14	**-.0000228**	**.0000659**	**-0.35**	**0.729**	**-.0001521**	**.0001064**
bf15	**0**	(omitted)				
bf40	**.0786288**	**.0758899**	**1.04**	**0.300**	**-.0701127**	**.2273704**
deaw2	**.6463714**	**.2506264**	**2.58**	**0.010**	**.1551526**	**1.13759**
dvcew2	**1.46465**	**1.066188**	**1.37**	**0.170**	**-.6250398**	**3.554339**
sepaw2	**-1.747364**	**1.628008**	**-1.07**	**0.283**	**-4.938201**	**1.443472**
accdw2	**-.6760904**	**.5387942**	**-1.25**	**0.210**	**-1.732108**	**.3799268**
movew2	**-.5261615**	**.493185**	**-1.07**	**0.286**	**-1.492786**	**.4404633**
radhlw2	**0**	(omitted)				
illw2	**-.1619986**	**.1844507**	**-0.88**	**0.380**	**-.5235154**	**.1995182**
shfamw2	**-.0039886**	**.0060041**	**-0.66**	**0.506**	**-.0157565**	**.0077793**
shhlw2	**-.0091905**	**.0062486**	**-1.47**	**0.141**	**-.0214375**	**.0030565**
shjobw2	**.0003458**	**.0057176**	**0.06**	**0.952**	**-.0108605**	**.011552**
shrelaw2	**-.0091776**	**.006756**	**-1.36**	**0.174**	**-.0224192**	**.0040639**
suprtw2	**-.0077623**	**.0046946**	**-1.65**	**0.098**	**-.0169635**	**.0014389**
suchrw2	**.0040413**	**.0050755**	**0.80**	**0.426**	**-.0059065**	**.013989**
havmilsq	**-1.23e-06**	**2.83e-06**	**-0.44**	**0.664**	**-6.79e-06**	**4.32e-06**
_cons	**12.31935**	**1273.659**	**0.01**	**0.992**	**-2484.005**	**2508.644**

Logistic model for HP2hmcare

Classified	True D	True ~D	Total
+	**85**	**27**	**112**
-	**39**	**211**	**250**
Total	**124**	**238**	**362**

Classified + if predicted Pr(D) >= .5
True D defined as HP2hmcare != 0

Sensitivity	Pr(+| D)	**68.55%**
Specificity	Pr(-|~D)	**88.66%**
Positive predictive value	Pr(D| +)	**75.89%**
Negative predictive value	Pr(~D| -)	**84.40%**
False + rate for true ~D	Pr(+|~D)	**11.34%**
False - rate for true D	Pr(-| D)	**31.45%**
False + rate for classified +	Pr(~D| +)	**24.11%**
False - rate for classified -	Pr(D| -)	**15.60%**
Correctly classified		**81.77%**

Logistic model for HP2hmcare, goodness-of-fit test

```
       number of observations =       362
 number of covariate patterns =       362
            Pearson chi2(316) =       339.77
                  Prob > chi2 =         0.1713
```

Measures of Fit for **logistic** of **HP2hmcare**

Log-Lik Intercept Only:	**-232.660**	Log-Lik Full Model:	**-144.488**
D(312):	**288.975**	LR(45):	**176.345**
		Prob > LR:	**0.000**
McFadden's R2:	**0.379**	McFadden's Adj R2:	**0.164**
Maximum Likelihood R2:	**0.386**	Cragg & Uhler's R2:	**0.533**
McKelvey and Zavoina's R2:	**0.660**	Efron's R2:	**0.429**
Variance of y*:	**9.672**	Variance of error:	**3.290**
Count R2:	**0.818**	Adj Count R2:	**0.468**
AIC:	**1.075**	AIC*n:	**388.975**
BIC:	**-1549.218**	BIC':	**88.779**

```
454 .
455 . title4 "Partly trimmed Female Main effects model for dose=> homecare Wave 2"
    >
```

Partly trimmed Female Main effects model for dose=> homecare Wave 2

```
456 .   logit hp2hmcare age radhlw2 occ1w2-occ8w2 inc1w2-inc4w2 ///
    >      avgcumdosew2 bf4 bf7 deaw2 if gender==2

Iteration 0:   log likelihood = -233.72859
Iteration 1:   log likelihood = -172.25111
Iteration 2:   log likelihood = -169.51991
Iteration 3:   log likelihood = -169.49972
Iteration 4:   log likelihood = -169.49971

Logistic regression                               Number of obs   =        363
                                                  LR chi2(18)     =     128.46
                                                  Prob > chi2     =     0.0000
Log likelihood = -169.49971                       Pseudo R2       =     0.2748
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.079561	.0142687	5.58	0.000	.0515948	.1075272
radhlw2	-.0083952	.0044827	-1.87	0.061	-.0171812	.0003907
occ1w2	-2.32278	1.311607	-1.77	0.077	-4.893483	.2479237
occ2w2	-1.88582	1.338008	-1.41	0.159	-4.508267	.7366266
occ3w2	-1.509669	1.335746	-1.13	0.258	-4.127683	1.108345
occ4w2	-2.168722	1.418902	-1.53	0.126	-4.949719	.6122755
occ5w2	-3.544379	1.583073	-2.24	0.025	-6.647145	-.4416134
occ6w2	-3.825132	1.799878	-2.13	0.034	-7.352828	-.2974366
occ7w2	-1.495633	1.343599	-1.11	0.266	-4.12904	1.137773
occ8w2	-1.841158	1.495976	-1.23	0.218	-4.773218	1.090901
inc1w2	1.974091	1.375803	1.43	0.151	-.7224332	4.670615
inc2w2	2.865688	1.343638	2.13	0.033	.2322063	5.499169
inc3w2	2.529133	1.351328	1.87	0.061	-.1194215	5.177687
inc4w2	2.74918	1.595275	1.72	0.085	-.3775016	5.875861
avgcumdosew2	-.2305613	.0983157	-2.35	0.019	-.4232564	-.0378661
bf4	-.1537429	.030406	-5.06	0.000	-.2133376	-.0941483
bf7	-.1191117	.0581157	-2.05	0.040	-.2330165	-.0052069
deaw2	.335947	.1907639	1.76	0.078	-.0379434	.7098375
_cons	-3.075185	.953438	-3.23	0.001	-4.94389	-1.206481

```
457 .
458 . di as input "female trimmed model for dose-home care impact in wv 3: dose no
    > t signif"
    female trimmed model for dose-home care impact in wv 3: dose not signif

459 . di as input " female dose is not signif as main effect in dose - homecare im
    > pact "
     female dose is not signif as main effect in dose - homecare impact

460 . di as input  " no female moderate interactions for dose-homecare impact"
     no female moderate interactions for dose-homecare impact

461 .
462 . scalar SigDoseHmcrFw2 = "yes"

463 . scalar MainEffhmcrFw2= "age radhlw2 b4 avgcumdosew2 inc2w2"

464 . scalar list
    MainEffhmcrFw2 = age radhlw2 b4 avgcumdosew2 inc2w2
    hmcrMedFw2 = radhlw2 age bf40 bf4m bf4 bf1
    MainEffwkFw2 = age
    MainEffwkMw2 = age
    inthobMedMw2 = age
     inthobMw2 = age
    sxlifeMedMw2 = age illw2
    SigDoseSxlifeFw2 = no
    MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
    PrbfmhmModMw2 = none
    MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
    MainEffPrbsocMw2 = age radhlw2 shjobw2
    hmcrModMw2 = none
    MainEffhmcrMw2 = age
      wkMedFw2 = age b4
      wkMedMw2 = age bf4
    MainEffVactnMw2 = age radhlw2
    MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
    MainEffPrbfmhmMw2 = bf4 bf6 bf7
    ProbsocMedFw2 = age bf4 radhlw2
    hmcareMedFw2 = age bf4
     WkhmcrMw2 = age b4
    MainEffhmcrw2 = age
    hmcrModFw2 = none
    SigDoseHmcrFw2 = yes
    NumhmcrModMw2 = none
    SigDosehmcrMw2 = no
    SigdosehmcrFw2 = yes
    hmcrMedMw2 = age ageXillw2
    SigDosehmcrFw2 = no
    MainEffhmcareMw2 = age
```

```
  WkMedMw2 = age ageXillw2
  wkMedFw3 = radhlw3 age ageXillw3 bf40 bf4m bf1
VactnMedFw2 = age illw2 radhlw2
VactnMedMw2 = age illw2
VacatnModFw2 = none
MainEffVactnFw2 = age radhlw2 bf7m
SigDoseVactnFw2 = no
VactnModMw2 = none
vactnModMw2 = none
SigDoseVactnMw2 = no
inthobMedFw2 = age bf4 illw2 bf4m
InthbModFw2 = none
MainEffInthbFw2 = age radhlw2 bf4
SigdoseInthbFw2 = no
InthbModMw2 = none
MainEffInthbMw2 = age radhlw2 shfamw2
SigDoseInthbMw2 = no
MainEffMw2 = radhlw2 bf4 bf40
SigdoseMEinthob = no
sxlifeMedFw2 = age illw2 radhlw2 bf4 bf4m
SxLifeModFw2 = no
sxlifeModFw2 = none
sxlifeModMw2 = none
SigDosesxlifeMw2 = no
PrbfmhmMedFw2 = age bf4
PrbfmhmMedMw2 = age
PrbfmhmModFw2 = none
MainEffPrbfmhmFw2 = age bf4 bf40
SigDosePrbfmhmFw2 = no
PrbfmhmModw2 = none
SigDosePrbfmhmMw2 = no
SigDosePrbfhmMw2 = no
MainEffPrbfhmMw2 = bf4 bf6 bf7
ProbsocMedMw2 = age
ProbsocModFw2 = none
SigDoseProbsocFw2 = yes
ProbSocModMw2 = none
SigDoseProbsocMw2 = no
PrbsocModMw2 = none
SigdoseMw2 = none
hmcareMedMw2 = age
hmcareModFw2 = none
MainEffhmcarew2 = age
SigdoseHmcareFw2 = no
hmcareModMw2 = none
SigDoseHmcareMw2 = no
NameMedMw2 = age ageXillw2
 NumModMw2 = none
SigDosehmcareMw2 = no
```

```
SigDoseWKMw2 = no
  WkMedFw2 = age bf4
  WkModFw2 = none
  WKModMw2 = none
SigDoseWkMw2 = no
SigDoseWkFw2 = no
SigDoseFw2 = no
  wkModFw2 = none
  wkModMw2 = none
VactnMedFw3 = age illw3 radhlw3
VactnMedMw3 = age illw3
VacatnModFw3 = none
MainEffVactnFw3 = age radhlw3 deaw3
SigDoseVactnFw3 = no
vactnModMw3 = none
MainEffVactnMw3 = age bf7m radhlw3
SigDoseVactnMw3 = no
sxLifeMedFw3 = age bf4 bf4m
sxLifeMedMw3 = age illw3
InthbModFw3 = none
MainEffInthbFw3 = age radhlw3 bf4
SigdoseInthbFw3 = no
  InthbMw3 = none
MainEffInthbMw3 = age radhlw3 shfamw3
SigDoseInthbMw3 = no
sxlifeMedFw3 = age illw3 radhlw3 bf4 bf4m
sxlifeMedMw3 = age illw3
sxlifeModFw3 = none
MainEffsxlifeFw3 = age radhlw3 bf4 bf4m shrelaw3 shfamw3
SigDoseSxlifeFw3 = no
sxlifeModMw3 = none
SigDosesxlifeMw3 = no
MainEffsxlifeMw3 = age bf4 illw3 radhlw3
PrbfmhmMedFw3 = age bf4
PrbfmhmMedMw3 = age
PrbfmhmModFw3 = none
MainEffPrbfmhmFw3 = age bf4 bf40
SigDosePrbfmhmFw3 = no
PrbfmhmModw3 = none
SigDosePrbfmhmMw3 = no
SigDosePrbfhmMw3 = no
MainEffPrbfhmMw3 = bf1 bf4 dvcew3 bf7m
ProbsocMedFw3 = age radhlw3
ProbsocMedMw3 = age
ProbsocModFw3 = none
MainEffProbSocFw3 = age radhlw3 illw3 Shrelaw3 avgcumodsew3
SigDoseProbsocFw3 = yes
ProbSocModMw3 = none
SigDoseProbsocMw3 = no
```

```
MainEffPrbsocMw3 = age radhlw3 shjobw3
hmcareMedFw3 = age illw3
hmcareMedMw3 = age illw3
hmcareModFw3 = none
SigdoseHmcareFw3 = no
hmcareModMw3 = none
MainEffhmcareMw3 = none
SigDoseHmcareMw3 = no
  wkMedMw3 = bf8 age illw3 ageXillw3
  wkModFw3 = none
  wkModMw3 = none
MainEffwkFw3 = age
MainEffwkMw3 = workM: age  bf8  illw3  shjobw3
SigDoseWKMw3 = no
SigDoseWkFw3 = no

465 .
466 . title4 "Fully trimmed Female Main effects model for dose=> homecare Wave 2"

Fully trimmed Female Main effects model for dose=> homecare Wave 2

467 .   logit hp2hmcare age radhlw2 occ1w2-occ8w2 inc1w2-inc4w2 ///
    >      avgcumdosew2 bf4 bf7 if gender==2

Iteration 0:   log likelihood = -233.72859
Iteration 1:   log likelihood = -173.85645
Iteration 2:   log likelihood = -171.23111
Iteration 3:   log likelihood = -171.21316
Iteration 4:   log likelihood = -171.21315

Logistic regression                               Number of obs   =        363
                                                  LR chi2(17)     =     125.03
                                                  Prob > chi2     =     0.0000
Log likelihood = -171.21315                       Pseudo R2       =     0.2675
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0819767	.0142028	5.77	0.000	.0541397	.1098137
radhlw2	-.0078775	.0044202	-1.78	0.075	-.016541	.0007859
occ1w2	-2.242774	1.301364	-1.72	0.085	-4.793401	.3078536
occ2w2	-1.846605	1.328554	-1.39	0.165	-4.450523	.7573135
occ3w2	-1.427003	1.326565	-1.08	0.282	-4.027023	1.173016
occ4w2	-2.012805	1.40509	-1.43	0.152	-4.76673	.7411195
occ5w2	-3.538941	1.580125	-2.24	0.025	-6.63593	-.4419532
occ6w2	-3.768093	1.762492	-2.14	0.033	-7.222513	-.3136722
occ7w2	-1.546761	1.332033	-1.16	0.246	-4.157497	1.063975
occ8w2	-1.768467	1.488276	-1.19	0.235	-4.685435	1.148501

```
     inc1w2 |   1.822692   1.361957     1.34   0.181    -.8466958    4.492079
     inc2w2 |   2.706743   1.329501     2.04   0.042      .100968    5.312517
     inc3w2 |   2.344358   1.336604     1.75   0.079    -.2753368    4.964053
     inc4w2 |   2.501679   1.567188     1.60   0.110    -.5699539    5.573311
avgcumdosew2 |  -.2371789   .0989186    -2.40   0.016    -.4310558   -.0433019
        bf4 |  -.1518277   .0301026    -5.04   0.000    -.2108276   -.0928278
        bf7 |  -.1176948   .0584053    -2.02   0.044    -.2321671   -.0032225
      _cons |  -3.013568   .9447932    -3.19   0.001    -4.865329   -1.161807
------------------------------------------------------------------------------

468 .
469 . title4 "Super trimmed Female Main effects model for dose=> homecare Wave 2"
------------------------------------------------------------------------------
Super trimmed Female Main effects model for dose=> homecare Wave 2
------------------------------------------------------------------------------

470 .   sw, pr(.1): logit hp2hmcare age radhlw2 occ1w2-occ8w2 inc1w2-inc4w2 ///
>      avgcumdosew2 bf4 bf7 if gender==2
                      begin with full model
p = 0.2821 >= 0.1000  removing occ3w2
p = 0.6236 >= 0.1000  removing occ7w2
p = 0.6398 >= 0.1000  removing occ8w2
p = 0.4881 >= 0.1000  removing inc1w2
p = 0.4545 >= 0.1000  removing occ2w2
p = 0.5211 >= 0.1000  removing occ4w2
p = 0.3199 >= 0.1000  removing inc4w2
p = 0.1918 >= 0.1000  removing inc3w2
p = 0.1378 >= 0.1000  removing occ1w2
p = 0.1362 >= 0.1000  removing occ6w2

Logistic regression                               Number of obs   =        363
                                                  LR chi2(7)      =     113.92
                                                  Prob > chi2     =     0.0000
Log likelihood = -176.76786                       Pseudo R2       =     0.2437
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0809999	.0131645	6.15	0.000	.0551979	.1068019
radhlw2	-.008483	.0042861	-1.98	0.048	-.0168836	-.0000824
bf4	-.1415224	.0280339	-5.05	0.000	-.1964677	-.086577
avgcumdosew2	-.2113393	.0943544	-2.24	0.025	-.3962706	-.026408
bf7	-.1047511	.0556644	-1.88	0.060	-.2138513	.0043492
inc2w2	.5976184	.274636	2.18	0.030	.0593418	1.135895
occ5w2	-1.577132	.9099374	-1.73	0.083	-3.360576	.2063126
_cons	-2.87938	.823917	-3.49	0.000	-4.494227	-1.264532

```
471 .
472 . cap gen radhlw2Xd2 = radhlw2*avgcumdosew2

473 . cap gen inc2w2Xd2 = inc2w2*avgcumdosew2

474 .
475 . title2 "female main effect plus interaction model"
```

title2: female main effect plus interaction model

Date and time: 17 Jun 2012 10:06:04

Working directory: /Users/robertyaffee
> /Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2

Stata data file: chwide16june2012.dta
> has 2384 variables and 703 observations

female main effect plus interaction model

```
476 . xi:logit hp2hmcare age  avgcumdosew2 bf4  ageXd2 bf4Xd2 radhlw2Xd2 ///
    >     inc2w2 inc2w2Xd2 if gender==2

Iteration 0:   log likelihood = -233.72859
Iteration 1:   log likelihood = -182.44019
Iteration 2:   log likelihood = -181.11746
Iteration 3:   log likelihood = -181.11148
Iteration 4:   log likelihood = -181.11148

Logistic regression                               Number of obs   =        363
                                                  LR chi2(8)      =     105.23
                                                  Prob > chi2     =     0.0000
Log likelihood = -181.11148                       Pseudo R2       =     0.2251
```

hp2hmcare	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0738073	.0154412	4.78	0.000	.0435431	.1040715
avgcumdosew2	-.805145	.920628	-0.87	0.382	-2.609543	.9992527
bf4	-.1260231	.0343389	-3.67	0.000	-.1933261	-.0587202
ageXd2	.0062691	.013444	0.47	0.641	-.0200806	.0326189
bf4Xd2	.0040762	.0279505	0.15	0.884	-.0507058	.0588581
radhlw2Xd2	-.0002867	.0024983	-0.11	0.909	-.0051834	.0046099
inc2w2	.3655336	.357839	1.02	0.307	-.335818	1.066885
inc2w2Xd2	.2525036	.3220194	0.78	0.433	-.3786429	.8836502
_cons	-3.100171	.9665279	-3.21	0.001	-4.994531	-1.205811

```
477 .
478 . * there are no significant moderators for female dose=hmcare relationship
479 . scalar hmcrModFw2 = "none"

480 .
481 .
482 .
483 . scalar SigdosehmcrFw2="yes"

484 .
485 .
486 . scalar MainEffhmcrw2 = "age"

487 . scalar hmcrModFw2 = "none"

488 .
489 .
490 . title4 "Mediator relationships for home care are tested below"
    ________________________________________________________________________________

    Mediator relationships for home care are tested below
    ________________________________________________________________________________


491 . title4  "H1 pt 2 wave 2 Mediation of home care testing for males"
    ________________________________________________________________________________

    H1 pt 2 wave 2 Mediation of home care testing for males
    ________________________________________________________________________________


492 .
493 . * male hp2wk w2 mediators:  testing b4 and b40
494 .
495 .
496 . correlate bf4 age if gender==1
    (obs=340)

                 |      bf4      age
    -------------+------------------
             bf4 |   1.0000
             age |  -0.4041   1.0000
```

```
497 .
498 . des bf4

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)

499 . title4 "Possible male mediators in wave 2" "bf4 can be a male mediator in wa
    > ve 2"
    ------------------------------------------------------------------------------
    Possible male mediators in wave 2
    ------------------------------------------------------------------------------

500 . glm bf4 age avgcumdosew2 if gender==1, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -996.64953

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       337
                                                       Scale parameter =   20.7725
    Deviance         =  7000.331927                    (1/df) Deviance =   20.7725
    Pearson          =  7000.331927                    (1/df) Pearson  =   20.7725

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  5.880291
    Log likelihood   = -996.6495299                    BIC             =  5035.977

    ------------------------------------------------------------------------------
                 |                 OIM
             bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             age |  -.1659274   .0203994    -8.13   0.000    -.2059095   -.1259453
    avgcumdosew2 |   .0636104   .0995687     0.64   0.523    -.1315406    .2587614
           _cons |   20.59657   1.026594    20.06   0.000     18.58448    22.60866
    ------------------------------------------------------------------------------
```

```
501 . glm hp2hmcare bf4 age if gender==1, fam(binomial) link(probit) irls scale(de
    > v)

    Iteration 1:   deviance =    265.85
    Iteration 2:   deviance =  261.7102
    Iteration 3:   deviance =  261.5892
    Iteration 4:   deviance =  261.5887
    Iteration 5:   deviance =  261.5887
    Iteration 6:   deviance =  261.5887

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       337
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  261.5886708                    (1/df) Deviance =  .7762275
    Pearson          =  284.8259081                    (1/df) Pearson  =  .8451807

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1702.766

    ------------------------------------------------------------------------------
                 |                 EIM
       hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             bf4 |  -.1318123   .0159309    -8.27   0.000    -.1630363   -.1005883
             age |   .0141501   .0068474     2.07   0.039     .0007294    .0275707
           _cons |  -.0621746   .4509187    -0.14   0.890     -.945959    .8216099
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

502 . title4 "age and bf4 can be wave 2 home care mediators for men"
    ------------------------------------------------------------------------------
    age and bf4 can be wave 2 home care mediators for men
    ------------------------------------------------------------------------------

503 .
```

```
504 .
505 . title4 "Age can be a male mediator in wave 2"
```

Age can be a male mediator in wave 2

```
506 . glm age avgcumdosew2 if gender==1, fam(gauss) link(identity)

Iteration 0:   log likelihood = -1330.6004

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  147.6853
Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  7.838826
Log likelihood   =   -1330.6004                    BIC             =  47947.46
```

age	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	.5832314	.2635871	2.21	0.027	.0666101	1.099853
_cons	48.62133	.7061562	68.85	0.000	47.23729	50.00537

```
507 . glm hp2hmcare age if gender==1, fam(binomial) link(probit) irls scale(dev)

Iteration 1:   deviance =  320.8295
Iteration 2:   deviance =  320.0337
Iteration 3:   deviance =  320.0328
Iteration 4:   deviance =  320.0328

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       338
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  320.0327771                    (1/df) Deviance =  .9468425
Pearson          =   341.699231                    (1/df) Pearson  =  1.010944

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1650.151
```

```
------------------------------------------------------------------------------
             |                 EIM
   hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |    .032545   .0064212     5.07   0.000     .0199596    .0451304
       _cons |  -2.483665   .3435565    -7.23   0.000    -3.157023   -1.810306
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

508 . title4 "age could be a home care mediator for men in wave 2"
--------------------------------------------------------------------------------
age could be a home care mediator for men in wave 2
--------------------------------------------------------------------------------

509 .
510 .
511 . scalar WkhmcrMw2 = "age b4"

512 . * moderate negative correlation between bf4 and age generates ///
> *    annihilation of effect among men in wave 2"
513 .
514 .
515 . title4 "Testing possible female home care mediators for home care in wave 2"
--------------------------------------------------------------------------------
Testing possible female home care mediators for home care in wave 2
--------------------------------------------------------------------------------

516 .
517 . title4 "Test of age as possible female mediator in wave 2"
--------------------------------------------------------------------------------
Test of age as possible female mediator in wave 2
--------------------------------------------------------------------------------

518 . glm age avgcumdosew2 if gender==2, fam(gauss) link(identity)

Iteration 0:   log likelihood = -1406.9403

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =  136.9184
Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  7.762756
Log likelihood   = -1406.940271                    BIC             =  47299.65
```

```
-----------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
       _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
-----------------------------------------------------------------------------
```

```
519 . glm hp2hmcare age if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  393.7958
    Iteration 2:   deviance =  393.6955
    Iteration 3:   deviance =  393.6955
    Iteration 4:   deviance =  393.6955

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  393.6954976                    (1/df) Deviance =  1.090569
    Pearson          =  375.4421438                    (1/df) Pearson  =  1.040006

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1734.184

    -----------------------------------------------------------------------------
                 |                 EIM
       hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+---------------------------------------------------------------
             age |   .0533501   .0069587     7.67   0.000     .0397113    .0669889
           _cons |  -3.144653   .3710751    -8.47   0.000    -3.871946   -2.417359
    -----------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

520 . title4 "age is a possible mediator for women"
    -----------------------------------------------------------------------------
    age is a possible mediator for women
    -----------------------------------------------------------------------------
```

```
521 .
522 .
523 . title4 "Test of b40 as female mediator of home care in wave 2"
    ─────────────────────────────────────────────────────────────────────────────
    Test of b40 as female mediator of home care in wave 2
    ─────────────────────────────────────────────────────────────────────────────

524 . glm bf40 age avgcumdosew2 if gender==2, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -812.90018

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        360
                                                       Scale parameter =   5.202871
    Deviance         =  1873.033605                    (1/df) Deviance =   5.202871
    Pearson          =  1873.033605                    (1/df) Pearson  =   5.202871

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   4.495318
    Log likelihood   =  -812.900181                    BIC             =  -248.9514

    ─────────────────────────────────────────────────────────────────────────────
                 |                 OIM
            bf40 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ─────────────┼───────────────────────────────────────────────────────────────
             age |   .0344949   .0102598     3.36   0.001     .0143862    .0546037
    avgcumdosew2 |   .1276677   .0881819     1.45   0.148    -.0451657    .3005011
           _cons |   1.318795   .5213154     2.53   0.011     .2970355    2.340554
    ─────────────────────────────────────────────────────────────────────────────

525 . glm hp2hmcare bf40  age if gender==2, fam(binomial) link(probit) irls scale(
    > dev)

    Iteration 1:   deviance =  393.1464
    Iteration 2:   deviance =  393.0302
    Iteration 3:   deviance =  393.0302
    Iteration 4:   deviance =  393.0302

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        360
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  393.0302033                    (1/df) Deviance =   1.091751
    Pearson          =  376.1478629                    (1/df) Pearson  =   1.044855

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]
```

```
                                                  BIC             = -1728.955

------------------------------------------------------------------------------
             |                 EIM
   hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        bf40 |   .0261466   .0330724     0.79   0.429    -.0386742    .0909673
         age |   .0524779   .0070473     7.45   0.000     .0386654    .0662903
       _cons |  -3.184271    .375224    -8.49   0.000    -3.919696   -2.448845
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

526 . title4 "b40 with age is a mediator for women"
------------------------------------------------------------------------------
b40 with age is a mediator for women
------------------------------------------------------------------------------


527 .
528 .
529 . title4 "bf40 Test of female mediation of home care in wave 2"
------------------------------------------------------------------------------
bf40 Test of female mediation of home care in wave 2
------------------------------------------------------------------------------


530 . glm bf40 avgcumdosew2 if gender==2, fam(gauss) link(identity)

Iteration 0:   log likelihood = -818.51169

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =  5.351378
Deviance         =  1931.847477                    (1/df) Deviance =  5.351378
Pearson          =  1931.847477                    (1/df) Pearson  =  5.351378

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  4.520726
Log likelihood   = -818.5116931                    BIC             = -196.0319

------------------------------------------------------------------------------
             |                 OIM
        bf40 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .1794903   .0880548     2.04   0.042     .0069061    .3520745
       _cons |   3.004543   .1447786    20.75   0.000     2.720783    3.288304
------------------------------------------------------------------------------
```

```
531 . glm hp2hmcare bf40 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =   462.764
    Iteration 2:   deviance =  462.2054
    Iteration 3:   deviance =  462.2053
    Iteration 4:   deviance =  462.2053

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        361
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  462.2053395                    (1/df) Deviance =   1.280347
    Pearson          =  362.3613268                    (1/df) Pearson  =   1.003771

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1665.674

    ------------------------------------------------------------------------------
                 |                 EIM
       hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
            bf40 |   .0666058   .0327979     2.03   0.042     .0023231    .1308886
           _cons |  -.6159451   .1313241    -4.69   0.000    -.8733356   -.3585546
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

532 . title4 "bf40 alone is a mediator for women"
    ------------------------------------------------------------------------------
    bf40 alone is a mediator for women
    ------------------------------------------------------------------------------

533 .
534 .
535 . title4 "bf4 Test of female mediation of home care in wave 2"
    ------------------------------------------------------------------------------
    bf4 Test of female mediation of home care in wave 2
    ------------------------------------------------------------------------------
```

```
536 . glm bf4 avgcumdosew2 if gender==2, fam(gauss) link(identity)

    Iteration 0:   log likelihood = -1109.0983

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        361
                                                       Scale parameter =   26.53281
    Deviance         =  9578.344971                    (1/df) Deviance =   26.53281
    Pearson          =  9578.344971                    (1/df) Pearson  =   26.53281

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   6.121754
    Log likelihood   = -1109.098281                    BIC             =   7450.466

    ------------------------------------------------------------------------------
                 |                 OIM
             bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   -.595012   .1960703    -3.03   0.002    -.9793027   -.2107212
           _cons |   11.02048   .3223763    34.19   0.000     10.38863    11.65232
    ------------------------------------------------------------------------------

537 . glm hp2hmcare bf4 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  410.1424
    Iteration 2:   deviance =  410.1166
    Iteration 3:   deviance =  410.1166
    Iteration 4:   deviance =  410.1166

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        361
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  410.1166157                    (1/df) Deviance =   1.136057
    Pearson          =  357.1140873                    (1/df) Pearson  =   .9892357

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1717.763
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.1024685**	**.0149808**	**-6.84**	**0.000**	**-.1318304**	**-.0731067**
_cons	**.6214741**	**.1665648**	**3.73**	**0.000**	**.295013**	**.9479351**

(Standard errors scaled using square root of deviance-based dispersion.)

538 . title4 "bf4 alone is a mediator for women"

bf4 alone is a mediator for women

539 .
540 .
541 .
542 . title4 "Test of female mediation of home care in wave 2"

Test of female mediation of home care in wave 2

543 . glm illw2 avgcumdosew2 if gender==2, fam(gauss) link(identity)

```
Iteration 0:   log likelihood = -463.51524

Generalized linear models                          No. of obs      =        363
Optimization     : ML                              Residual df     =        361
                                                   Scale parameter =    .756881
Deviance         =  273.2340487                    (1/df) Deviance =    .756881
Pearson          =  273.2340487                    (1/df) Pearson  =    .756881

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   2.564822
Log likelihood   = -463.5152411                    BIC             =  -1854.645
```

illw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**.1249912**	**.0331157**	**3.77**	**0.000**	**.0600856**	**.1898968**
_cons	**.301285**	**.0544484**	**5.53**	**0.000**	**.194568**	**.4080019**

```
544 . glm hp2hmcare illw2 if gender==2, fam(binomial) link(probit) irls scale(dev)

    Iteration 1:   deviance =  466.1156
    Iteration 2:   deviance =  465.4957
    Iteration 3:   deviance =  465.4956
    Iteration 4:   deviance =  465.4956

    Generalized linear models                         No. of obs      =        363
    Optimization     : MQL Fisher scoring             Residual df     =        361
                       (IRLS EIM)                     Scale parameter =          1
    Deviance         =  465.4955997                   (1/df) Deviance =   1.289461
    Pearson          =   362.823507                   (1/df) Pearson  =   1.005051

    Variance function: V(u) = u*(1-u)                 [Bernoulli]
    Link function    : g(u) = invnorm(u)              [Probit]

                                                      BIC             =  -1662.384

    ------------------------------------------------------------------------------
                 |                 EIM
       hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           illw2 |   .1070451   .0863777     1.24   0.215    -.0622522    .2763423
           _cons |  -.4461214   .0854256    -5.22   0.000    -.6135525   -.2786904
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

545 . title4 "illw2 alone is not a mediator for women"
    ------------------------------------------------------------------------------
    illw2 alone is not a mediator for women
    ------------------------------------------------------------------------------

546 .
547 .
548 .
549 .
550 . title4 "Test of female mediation of home care in wave 2"
    ------------------------------------------------------------------------------
    Test of female mediation of home care in wave 2
    ------------------------------------------------------------------------------
```

```
551 . mvreg bf4 age bf40 = avgcumdosew2 if gender==2

    Equation          Obs  Parms        RMSE    "R-sq"          F        P
    ----------------------------------------------------------------------
    bf4               363      2    5.151001    0.0249   9.209323   0.0026
    age               363      2    11.70121    0.0306   11.37694   0.0008
    bf40              363      2    2.313305    0.0114   4.155047   0.0422

    ------------------------------------------------------------------------------
                 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    bf4          |
    avgcumdosew2 |   -.595012   .1960703    -3.03   0.003    -.9805954   -.2094285
           _cons |   11.02048   .3223763    34.19   0.000     10.38651    11.65445
    -------------+----------------------------------------------------------------
    age          |
    avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6264181    2.378231
           _cons |   48.86944   .7323225    66.73   0.000     47.42929     50.3096
    -------------+----------------------------------------------------------------
    bf40         |
    avgcumdosew2 |   .1794903   .0880548     2.04   0.042     .0063255    .3526551
           _cons |   3.004543   .1447786    20.75   0.000     2.719828    3.289259
    ------------------------------------------------------------------------------

552 . glm hp2hmcare bf4 age bf40 if gender==2, fam(binomial) link(probit) irls ///
    >   scale(dev)

    Iteration 1:   deviance =  373.2413
    Iteration 2:   deviance =  372.8437
    Iteration 3:   deviance =  372.8436
    Iteration 4:   deviance =  372.8436

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       359
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  372.8435707                    (1/df) Deviance =  1.038561
    Pearson          =  384.2294832                    (1/df) Pearson  =  1.070277

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1743.247
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.0701088**	**.0159082**	**-4.41**	**0.000**	**-.1012882**	**-.0389293**
age	**.0419129**	**.007264**	**5.77**	**0.000**	**.0276756**	**.0561501**
bf40	**-.0040389**	**.0340124**	**-0.12**	**0.905**	**-.070702**	**.0626242**
_cons	**-1.841186**	**.4704258**	**-3.91**	**0.000**	**-2.763204**	**-.9191686**

(Standard errors scaled using square root of deviance-based dispersion.)

```
553 . title4 "When bf4 bf40 & age are together" ///
    >  "only age & b4 are a wave 2 mediators for women"
```

When bf4 bf40 & age are together

```
554 .
555 .
556 .
557 .
558 . title "Test of female mediation of home care in wave 2"
```

```
****************************************************************************
> *
****************************************************************************
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****          Test of female mediation of home care in wave 2          ****
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****                                           17 Jun 2012    10:06:29  ****
> *
****************************************************************************
> *
****************************************************************************
> *
```

```
559 . mvreg bf4 age bf40 illw2 = avgcumdosew2 if gender==2

    Equation           Obs  Parms        RMSE    "R-sq"          F        P
    ------------------------------------------------------------------------
    bf4                363      2    5.151001    0.0249   9.209323   0.0026
    age                363      2    11.70121    0.0306   11.37694   0.0008
    bf40               363      2    2.313305    0.0114   4.155047   0.0422
    illw2              363      2    .8699891    0.0380   14.24594   0.0002

    --------------------------------------------------------------------------------
                 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+------------------------------------------------------------------
    bf4          |
    avgcumdosew2 |   -.595012   .1960703    -3.03   0.003    -.9805954   -.2094285
           _cons |   11.02048   .3223763    34.19   0.000     10.38651    11.65445
    -------------+------------------------------------------------------------------
    age          |
    avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6264181    2.378231
           _cons |   48.86944   .7323225    66.73   0.000     47.42929     50.3096
    -------------+------------------------------------------------------------------
    bf40         |
    avgcumdosew2 |   .1794903   .0880548     2.04   0.042     .0063255    .3526551
           _cons |   3.004543   .1447786    20.75   0.000     2.719828    3.289259
    -------------+------------------------------------------------------------------
    illw2        |
    avgcumdosew2 |   .1249912   .0331157     3.77   0.000     .0598673    .1901152
           _cons |    .301285   .0544484     5.53   0.000     .1942091    .4083609
    --------------------------------------------------------------------------------

560 . glm hp2hmcare bf4 age bf40 illw2 if gender==2, fam(binomial) ///
    >    link(probit) irls scale(dev)

    Iteration 1:   deviance =  371.4357
    Iteration 2:   deviance =  371.0168
    Iteration 3:   deviance =  371.0167
    Iteration 4:   deviance =  371.0167

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       358
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  371.0167043                    (1/df) Deviance =   1.03636
    Pearson          =  385.0960041                    (1/df) Pearson  =  1.075687

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1739.18
```

```
------------------------------------------------------------------------------
             |                 EIM
   hp2hmcare |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf4 |  -.0756726   .0166172    -4.55   0.000    -.1082417   -.0431034
         age |     .04214   .0072721     5.79   0.000     .0278868    .0563931
        bf40 |   .0027501   .0343366     0.08   0.936    -.0645483    .0700486
       illw2 |  -.1146115   .0858363    -1.34   0.182    -.2828475    .0536245
       _cons |  -1.768282   .4754356    -3.72   0.000    -2.700118   -.8364451
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

561 . qui: {
When all are together only age and b4 are a wave 2 mediators for women

562 .
563 .
564 . scalar hmcrMedFw2 = "age bf4"

565 .
566 . scalar SigDosehmcrMw2 = "no"

567 . scalar MainEffhmcrMw2 = "age"

568 . scalar MainEffhmcrFw2 = "age"

569 . scalar hmcrFw2 = "none"

570 .
571 .
572 .
573 .
574 . glm radhlw2 avgcumdosew2 if gender==1,  fam(gaussian) link(identity)

Iteration 0:   log likelihood = -1693.4076

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  1247.933
Deviance         =  421801.4584                    (1/df) Deviance =  1247.933
Pearson          =  421801.4584                    (1/df) Pearson  =  1247.933

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  9.972986
Log likelihood   = -1693.407647                    BIC             =  419831.3
```

radhlw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**1.220373**	**.766216**	**1.59**	**0.111**	**-.2813831**	**2.722128**
_cons	**45.63198**	**2.052711**	**22.23**	**0.000**	**41.60874**	**49.65522**

```
575 . glm hp2hmcare radhlw2 if gender==1 , fam(binomial) irls scale(dev) link(prob
> it)

Iteration 1:   deviance =  320.2142
Iteration 2:   deviance =  319.4143
Iteration 3:   deviance =  319.4134
Iteration 4:   deviance =  319.4134

Generalized linear models                          No. of obs      =        340
Optimization     : MQL Fisher scoring              Residual df     =        338
                   (IRLS EIM)                      Scale parameter =          1
Deviance         =  319.4134212                    (1/df) Deviance =   .9450101
Pearson          =  343.7631942                    (1/df) Pearson  =   1.017051

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             =   -1650.77
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
radhlw2	**.0113273**	**.0022041**	**5.14**	**0.000**	**.0070074**	**.0156472**
_cons	**-1.415444**	**.1449647**	**-9.76**	**0.000**	**-1.69957**	**-1.131318**

(Standard errors scaled using square root of deviance-based dispersion.)

576 .

```
577 .
578 .
579 . glm radhlw2 avgcumdosew2 if gender==2,  fam(gaussian) link(identity)

    Iteration 0:   log likelihood = -1791.2233

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        361
                                                       Scale parameter =   1137.567
    Deviance         =  410661.5604                    (1/df) Deviance =   1137.567
    Pearson          =  410661.5604                    (1/df) Pearson  =   1137.567

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   9.880018
    Log likelihood   = -1791.223306                    BIC             =   408533.7

    ------------------------------------------------------------------------------
                 |                 OIM
         radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   3.302288   1.283833     2.57   0.010     .7860214    5.818555
           _cons |   56.95167   2.110863    26.98   0.000     52.81445    61.08888
    ------------------------------------------------------------------------------

580 . glm hp2hmcare radhlw2 if gender==2 , fam(binomial) irls scale(dev) link(prob
    > it)

    Iteration 1:   deviance =  465.9397
    Iteration 2:   deviance =   465.344
    Iteration 3:   deviance =  465.3439
    Iteration 4:   deviance =  465.3439

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        361
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  465.3438602                    (1/df) Deviance =   1.289041
    Pearson          =  362.9626143                    (1/df) Pearson  =   1.005437

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1662.536
```

hp2hmcare	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
radhlw2	**.0029148**	**.0022776**	**1.28**	**0.201**	**-.0015493**	**.0073789**
_cons	**-.5772317**	**.1586961**	**-3.64**	**0.000**	**-.8882703**	**-.266193**

(Standard errors scaled using square root of deviance-based dispersion.)

```
581 .
582 . scalar hmcareMedMw2 = "age "

583 . scalar hmcareMedFw2 = "age bf4"

584 . set more off

585 . scalar list
      hmcrFw2 = none
    MainEffhmcrFw2 = age
    hmcrMedFw2 = age bf4
    MainEffwkFw2 = age
    MainEffwkMw2 = age
    inthobMedMw2 = age
     inthobMw2 = age
    sxlifeMedMw2 = age illw2
    SigDoseSxlifeFw2 = no
    MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
    PrbfmhmModMw2 = none
    MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
    MainEffPrbsocMw2 = age radhlw2 shjobw2
    hmcrModMw2 = none
    MainEffhmcrMw2 = age
      wkMedFw2 = age b4
      wkMedMw2 = age bf4
    MainEffVactnMw2 = age radhlw2
    MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
    MainEffPrbfmhmMw2 = bf4 bf6 bf7
    ProbsocMedFw2 = age bf4 radhlw2
    hmcareMedFw2 = age bf4
     WkhmcrMw2 = age b4
    MainEffhmcrw2 = age
    hmcrModFw2 = none
    SigDoseHmcrFw2 = yes
    NumhmcrModMw2 = none
    SigDosehmcrMw2 = no
    SigdosehmcrFw2 = yes
    hmcrMedMw2 = age ageXillw2
    SigDosehmcrFw2 = no
    MainEffhmcareMw2 = age
```

```
  WkMedMw2 = age ageXillw2
  wkMedFw3 = radhlw3 age ageXillw3 bf40 bf4m bf1
VactnMedFw2 = age illw2 radhlw2
VactnMedMw2 = age illw2
VacatnModFw2 = none
MainEffVactnFw2 = age radhlw2 bf7m
SigDoseVactnFw2 = no
VactnModMw2 = none
vactnModMw2 = none
SigDoseVactnMw2 = no
inthobMedFw2 = age bf4 illw2 bf4m
InthbModFw2 = none
MainEffInthbFw2 = age radhlw2 bf4
SigdoseInthbFw2 = no
InthbModMw2 = none
MainEffInthbMw2 = age radhlw2 shfamw2
SigDoseInthbMw2 = no
MainEffMw2 = radhlw2 bf4 bf40
SigdoseMEinthob = no
sxlifeMedFw2 = age illw2 radhlw2 bf4 bf4m
SxLifeModFw2 = no
sxlifeModFw2 = none
sxlifeModMw2 = none
SigDosesxlifeMw2 = no
PrbfmhmMedFw2 = age bf4
PrbfmhmMedMw2 = age
PrbfmhmModFw2 = none
MainEffPrbfmhmFw2 = age bf4 bf40
SigDosePrbfmhmFw2 = no
PrbfmhmModw2 = none
SigDosePrbfmhmMw2 = no
SigDosePrbfhmMw2 = no
MainEffPrbfhmMw2 = bf4 bf6 bf7
ProbsocMedMw2 = age
ProbsocModFw2 = none
SigDoseProbsocFw2 = yes
ProbSocModMw2 = none
SigDoseProbsocMw2 = no
PrbsocModMw2 = none
SigdoseMw2 = none
hmcareMedMw2 = age
hmcareModFw2 = none
MainEffhmcarew2 = age
SigdoseHmcareFw2 = no
hmcareModMw2 = none
SigDoseHmcareMw2 = no
NameMedMw2 = age ageXillw2
 NumModMw2 = none
SigDosehmcareMw2 = no
```

```
SigDoseWKMw2 = no
  WkMedFw2 = age bf4
  WkModFw2 = none
  WKModMw2 = none
SigDoseWkMw2 = no
SigDoseWkFw2 = no
SigDoseFw2 = no
  wkModFw2 = none
  wkModMw2 = none
VactnMedFw3 = age illw3 radhlw3
VactnMedMw3 = age illw3
VacatnModFw3 = none
MainEffVactnFw3 = age radhlw3 deaw3
SigDoseVactnFw3 = no
vactnModMw3 = none
MainEffVactnMw3 = age bf7m radhlw3
SigDoseVactnMw3 = no
sxLifeMedFw3 = age bf4 bf4m
sxLifeMedMw3 = age illw3
InthbModFw3 = none
MainEffInthbFw3 = age radhlw3 bf4
SigdoseInthbFw3 = no
  InthbMw3 = none
MainEffInthbMw3 = age radhlw3 shfamw3
SigDoseInthbMw3 = no
sxlifeMedFw3 = age illw3 radhlw3 bf4 bf4m
sxlifeMedMw3 = age illw3
sxlifeModFw3 = none
MainEffsxlifeFw3 = age radhlw3 bf4 bf4m shrelaw3 shfamw3
SigDoseSxlifeFw3 = no
sxlifeModMw3 = none
SigDosesxlifeMw3 = no
MainEffsxlifeMw3 = age bf4 illw3 radhlw3
PrbfmhmMedFw3 = age bf4
PrbfmhmMedMw3 = age
PrbfmhmModFw3 = none
MainEffPrbfmhmFw3 = age bf4 bf40
SigDosePrbfmhmFw3 = no
PrbfmhmModw3 = none
SigDosePrbfmhmMw3 = no
SigDosePrbfhmMw3 = no
MainEffPrbfhmMw3 = bf1 bf4 dvcew3 bf7m
ProbsocMedFw3 = age radhlw3
ProbsocMedMw3 = age
ProbsocModFw3 = none
MainEffProbSocFw3 = age radhlw3 illw3 Shrelaw3 avgcumodsew3
SigDoseProbsocFw3 = yes
ProbSocModMw3 = none
SigDoseProbsocMw3 = no
```

```
    MainEffPrbsocMw3 = age radhlw3 shjobw3
    hmcareMedFw3 = age illw3
    hmcareMedMw3 = age illw3
    hmcareModFw3 = none
    SigdoseHmcareFw3 = no
    hmcareModMw3 = none
    MainEffhmcareMw3 = none
    SigDoseHmcareMw3 = no
      wkMedMw3 = bf8 age illw3 ageXillw3
      wkModFw3 = none
      wkModMw3 = none
    MainEffwkFw3 = age
    MainEffwkMw3 = workM: age  bf8  illw3  shjobw3
    SigDoseWKMw3 = no
    SigDoseWkFw3 = no

586 .
587 . * conclusion "age & illw2 are main effects as possible male & female mediato
    > rs"
588 . * conclusion title "their interaction is not a mediator"
589 .
590 . title4 "2. summary matrix construction for H1 pt 2 wave 2 dose=>Home care im
    > pact"
    ------------------------------------------------------------------------------
    2. summary matrix construction for H1 pt 2 wave 2 dose=>Home care impact
    ------------------------------------------------------------------------------

591 . set more off

592 .  matrix define   hmcrMw2 = J(1,8, 0)

593 .         matrix define  hmcrFw2 = J(1,8, 0)

594 . matrix colnames  hmcrMw2=  hypnum ptnum wave gender medsig numMAsig numModsi
    > g ///
    >     numMed
```

```
595 . matrix colnames  hmcrFw2=  hypnum ptnum wave gender medsig numMAsig numModsi
    > g ///
    >     numMed

596 .     matrix rownames  hmcrMw2 = hmcareM

597 .     matrix rownames  hmcrFw2 = hmcareF

598 .         matrix define  hmcrMw2= (1, 2, 3, 1, 0 , 1,  0  , 1 )

599 .          matrix define  hmcrFw2= (1, 2, 3, 2, 1 ,1,  0  , 2 )

600 .         matrix define H1pt2w2 = ( wkMw2 \  wkFw2 \  hmcrMw2 \ hmcrFw2)

601 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
    > odsig numMed

602 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
    > odsig numMed

603 .     matrix rownames H1pt2w2 =  wkMw2 wkFw2  hmcrMw2  hmcrFw2

604 .         matlist H1pt2w2

                 |    hypnum      ptnum       wave     gender     medsig   numMAsi
    > g  numModsig     numMed
    -------------+------------------------------------------------------------------
    > -------------------------
           wkMw2 |         1          2          2          1          0
    > 2          0          2
           wkFw2 |         1          2          2          2          0
    > 1          0          2
         hmcrMw2 |         1          2          3          1          0
    > 1          0          1
         hmcrFw2 |         1          2          3          2          1
    > 1          0          2
```

```
605 .
606 . * see scalar list for names of variables
607 . scalar list
    MainEffhmcrFw2 = age
    hmcrMedFw2 = age bf4
    MainEffwkFw2 = age
    MainEffwkMw2 = age
    inthobMedMw2 = age
     inthobMw2 = age
    sxlifeMedMw2 = age illw2
    SigDoseSxlifeFw2 = no
    MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
    PrbfmhmModMw2 = none
    MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
    MainEffPrbsocMw2 = age radhlw2 shjobw2
    hmcrModMw2 = none
    MainEffhmcrMw2 = age
      wkMedFw2 = age b4
      wkMedMw2 = age bf4
    MainEffVactnMw2 = age radhlw2
    MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
    MainEffPrbfmhmMw2 = bf4 bf6 bf7
    ProbsocMedFw2 = age bf4 radhlw2
    hmcareMedFw2 = age bf4
     WkhmcrMw2 = age b4
    MainEffhmcrw2 = age
    hmcrModFw2 = none
    SigDoseHmcrFw2 = yes
    NumhmcrModMw2 = none
    SigDosehmcrMw2 = no
    SigdosehmcrFw2 = yes
    hmcrMedMw2 = age ageXillw2
    SigDosehmcrFw2 = no
    MainEffhmcareMw2 = age
      WkMedMw2 = age ageXillw2
      wkMedFw3 = radhlw3 age ageXillw3 bf40 bf4m bf1
    VactnMedFw2 = age illw2 radhlw2
    VactnMedMw2 = age illw2
    VacatnModFw2 = none
    MainEffVactnFw2 = age radhlw2 bf7m
    SigDoseVactnFw2 = no
    VactnModMw2 = none
    vactnModMw2 = none
    SigDoseVactnMw2 = no
    inthobMedFw2 = age bf4 illw2 bf4m
    InthbModFw2 = none
    MainEffInthbFw2 = age radhlw2 bf4
    SigdoseInthbFw2 = no
    InthbModMw2 = none
```

```
MainEffInthbMw2 = age radhlw2 shfamw2
SigDoseInthbMw2 = no
MainEffMw2 = radhlw2 bf4 bf40
SigdoseMEinthob = no
sxlifeMedFw2 = age illw2 radhlw2 bf4 bf4m
SxLifeModFw2 = no
sxlifeModFw2 = none
sxlifeModMw2 = none
SigDosesxlifeMw2 = no
PrbfmhmMedFw2 = age bf4
PrbfmhmMedMw2 = age
PrbfmhmModFw2 = none
MainEffPrbfmhmFw2 = age bf4 bf40
SigDosePrbfmhmFw2 = no
PrbfmhmModw2 = none
SigDosePrbfmhmMw2 = no
SigDosePrbfhmMw2 = no
MainEffPrbfhmMw2 = bf4 bf6 bf7
ProbsocMedMw2 = age
ProbsocModFw2 = none
SigDoseProbsocFw2 = yes
ProbSocModMw2 = none
SigDoseProbsocMw2 = no
PrbsocModMw2 = none
SigdoseMw2 = none
hmcareMedMw2 = age
hmcareModFw2 = none
MainEffhmcarew2 = age
SigdoseHmcareFw2 = no
hmcareModMw2 = none
SigDoseHmcareMw2 = no
NameMedMw2 = age ageXillw2
 NumModMw2 = none
SigDosehmcareMw2 = no
SigDoseWKMw2 = no
  WkMedFw2 = age bf4
  WkModFw2 = none
  WKModMw2 = none
SigDoseWkMw2 = no
SigDoseWkFw2 = no
SigDoseFw2 = no
  wkModFw2 = none
  wkModMw2 = none
VactnMedFw3 = age illw3 radhlw3
VactnMedMw3 = age illw3
VacatnModFw3 = none
MainEffVactnFw3 = age radhlw3 deaw3
SigDoseVactnFw3 = no
vactnModMw3 = none
```

MainEffVactnMw3 = **age bf7m radhlw3**
SigDoseVactnMw3 = **no**
sxLifeMedFw3 = **age bf4 bf4m**
sxLifeMedMw3 = **age illw3**
InthbModFw3 = **none**
MainEffInthbFw3 = **age radhlw3 bf4**
SigdoseInthbFw3 = **no**
  InthbMw3 = **none**
MainEffInthbMw3 = **age radhlw3 shfamw3**
SigDoseInthbMw3 = **no**
sxlifeMedFw3 = **age illw3 radhlw3 bf4 bf4m**
sxlifeMedMw3 = **age illw3**
sxlifeModFw3 = **none**
MainEffsxlifeFw3 = **age radhlw3 bf4 bf4m shrelaw3 shfamw3**
SigDoseSxlifeFw3 = **no**
sxlifeModMw3 = **none**
SigDosesxlifeMw3 = **no**
MainEffsxlifeMw3 = **age bf4 illw3 radhlw3**
PrbfmhmMedFw3 = **age bf4**
PrbfmhmMedMw3 = **age**
PrbfmhmModFw3 = **none**
MainEffPrbfmhmFw3 = **age bf4 bf40**
SigDosePrbfmhmFw3 = **no**
PrbfmhmModw3 = **none**
SigDosePrbfmhmMw3 = **no**
SigDosePrbfhmMw3 = **no**
MainEffPrbfhmMw3 = **bf1 bf4 dvcew3 bf7m**
ProbsocMedFw3 = **age radhlw3**
ProbsocMedMw3 = **age**
ProbsocModFw3 = **none**
MainEffProbSocFw3 = **age radhlw3 illw3 Shrelaw3 avgcumodsew3**
SigDoseProbsocFw3 = **yes**
ProbSocModMw3 = **none**
SigDoseProbsocMw3 = **no**
MainEffPrbsocMw3 = **age radhlw3 shjobw3**
hmcareMedFw3 = **age illw3**
hmcareMedMw3 = **age illw3**
hmcareModFw3 = **none**
SigdoseHmcareFw3 = **no**
hmcareModMw3 = **none**
MainEffhmcareMw3 = **none**
SigDoseHmcareMw3 = **no**
  wkMedMw3 = **bf8 age illw3 ageXillw3**
  wkModFw3 = **none**
  wkModMw3 = **none**
MainEffwkFw3 = **age**
MainEffwkMw3 = **workM: age bf8 illw3 shjobw3**
SigDoseWKMw3 = **no**
SigDoseWkFw3 = **no**

```
608 .
609 . * X * missing the number of main effects in the trimmed models
610 .
611 . /////////////////////////////////////////////////////////////////////////
    > *--------- Chunk 4  Dose social problem impact relationship HP2probsoc
612 .
613 .
614 . title "3.  H1 part 2 wave 2  Dose - HP2probsoc impact tested"


    *******************************************************************************
    > *
    *******************************************************************************
    > *
    *****                                                                      ****
    > *
    *****                                                                      ****
    > *
    *****       3.  H1 part 2 wave 2  Dose - HP2probsoc impact tested          ****
    > *
    *****                                                                      ****
    > *
    *****                                                                      ****
    > *
    *****                                            17 Jun 2012    10:06:37   ****
    > *
    *******************************************************************************
    > *
    *******************************************************************************
    > *



615 .
616 . forvalues j = 2/2 {
  2. set more off
  3.
```

```
617 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
    >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
      4.
618 .   foreach var in HP2probsoc {
      5.        forvalues k=1/2 {
      6. di as input "Full main model for `var' for wave= `j' "
      7. di _skip(4)
      8. di as input  "chunk 4 H1 test:Gender= `k'  model Wave =  `j' for `e(depva
    > r)' "
      9. di _skip(4)
     10.
619 .
620 .       xi: logistic `var' age i.educ occ1w`j'-occ8w`j' ///
    >                 marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
    > //
    >                 radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
    >                  deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
    >                 illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
    > chrw`j' ///
    >                  havmilsq if gender==`k', coef  difficult iterate(50)
     11.                          estat class
     12.                          estat gof
     13.                          fitstat
     14. }
     15. }
     16. }

              storage  display     value
variable name   type   format      label      variable label
--------------------------------------------------------------------------------

age             double %8.0g                * Respondent's age
educ1           byte   %8.0g                  educ==1. did not graduate high
                                                school
educ2           byte   %8.0g                  educ==2. graduated high school
educ3           byte   %8.0g                  educ==3. technical degree
educ4           byte   %8.0g                  educ==4. did not finish
                                                college/bachelor's
educ5           byte   %8.0g                  educ==5. graduated
                                                college/bachelor's
educ6           byte   %8.0g                  educ==6. finished
                                                specialist/master's degree
educ7           byte   %8.0g                  educ==7. doctor of science/phd
marrw21         byte   %8.0g                  marrw2==1. single
marrw22         byte   %8.0g                  marrw2==2. cohabitating
marrw23         byte   %8.0g                  marrw2==3. married
marrw24         byte   %8.0g                  marrw2==4. separated
marrw25         byte   %8.0g                  marrw2==5. divorced
marrw26         byte   %8.0g                  marrw2==6. widowed
inc1w2          double %15.0g      LABJ       Income is not sufficient for
```

```
                                                         basic neccessities in 1996
inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                         basic neccessities in 1996
inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                         plus extra purchases/savings
                                                         in 1996
inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                         afford luxury items in 1996
bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf9             float  %9.0g                  bf9= max(0, 30 - shhlw1)
bf11            float  %9.0g                  bf11= max(0, 20 - sufamw1)
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
bf15m           float  %9.0g                  bf15m= max(0, 1 - icdxcnt) * bf2
bf30            float  %9.0g                  bf30 = max(0, neiw1 - 85) * bf20
bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                         1.01635E-007)
Full main model for HP2probsoc for wave= 2

chunk 4 H1 test:Gender= 1  model Wave =  2 for hp2hmcare

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ7w2 != 0 predicts failure perfectly
      occ7w2 dropped and 14 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 1 obs not used
```

```
note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        228
                                                  LR chi2(34)     =     103.91
                                                  Prob > chi2     =     0.0000
Log likelihood =  -52.36582                       Pseudo R2       =     0.4980

------------------------------------------------------------------------------
  HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0906854   .0339814     2.67   0.008     .0240831    .1572876
    _Ieduc_2 |  -.0346926   1.161856    -0.03   0.976    -2.311888    2.242503
    _Ieduc_3 |  -.6886648   .7207042    -0.96   0.339    -2.101219    .7238895
    _Ieduc_4 |          0  (omitted)
    _Ieduc_5 |   .9759744   1.063631     0.92   0.359    -1.108703    3.060652
    _Ieduc_6 |          0  (omitted)
    _Ieduc_7 |          0  (omitted)
    _Ieduc_8 |          0  (omitted)
      occ1w2 |  -.9172264   10.67202    -0.09   0.932    -21.83401    19.99955
      occ2w2 |  -.7254984   10.66823    -0.07   0.946    -21.63485    20.18385
      occ3w2 |  -.6714679   10.68886    -0.06   0.950    -21.62126    20.27832
      occ4w2 |  -2.239171   10.70842    -0.21   0.834    -23.22728    18.74894
      occ5w2 |  -.9195542   10.71455    -0.09   0.932    -21.91968    20.08057
      occ6w2 |          0  (omitted)
      occ7w2 |          0  (omitted)
      occ8w2 |          0  (omitted)
     marrw21 |    11.0684   1379.375     0.01   0.994    -2692.457    2714.594
     marrw22 |          0  (omitted)
     marrw23 |   8.945925   1379.375     0.01   0.995    -2694.579    2712.471
     marrw25 |          0  (omitted)
     marrw26 |          0  (omitted)
      inc1w2 |   .3641243   10.76623     0.03   0.973     -20.7373    21.46555
      inc2w2 |   1.742499   10.67327     0.16   0.870    -19.17672    22.66172
      inc3w2 |   3.371881   10.68463     0.32   0.752    -17.56961    24.31337
      inc4w2 |          0  (omitted)
     radhlw2 |   .0085407   .0114129     0.75   0.454    -.0138281    .0309095
      havmil |  -.0006807   .0078287    -0.09   0.931    -.0160246    .0146632
 avgcumdosew2|    .099739   .0947343     1.05   0.292    -.0859367    .2854148
         bf1 |   .0048596   .0179991     0.27   0.787    -.0304181    .0401372
```

bf4	-.3368708	.0845017	-3.99	0.000	-.5024911	-.1712504
bf6	.0294921	.0150976	1.95	0.051	-.0000987	.0590829
bf7	.2107792	.1280115	1.65	0.100	-.0401186	.4616771
bf14	-.0000508	.0001111	-0.46	0.648	-.0002685	.0001669
bf15	0	(omitted)				
bf40	.3587504	.202109	1.78	0.076	-.0373759	.7548768
deaw2	-.2425986	.5320938	-0.46	0.648	-1.285483	.8002861
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	-.0583869	.772113	-0.08	0.940	-1.571701	1.454927
movew2	.534895	.8346364	0.64	0.522	-1.100962	2.170752
illw2	.3093012	.430894	0.72	0.473	-.5352355	1.153838
shfamw2	-.0138199	.0107438	-1.29	0.198	-.0348774	.0072375
shhlw2	-.0108054	.0127581	-0.85	0.397	-.0358108	.0141999
shjobw2	.024033	.0121387	1.98	0.048	.0002416	.0478244
shrelaw2	-.0263531	.0111814	-2.36	0.018	-.0482683	-.0044379
suprtw2	.0130386	.0099595	1.31	0.190	-.0064816	.0325589
suchrw2	.0121677	.0099924	1.22	0.223	-.007417	.0317524
havmilsq	4.68e-06	9.92e-06	0.47	0.637	-.0000148	.0000241
_cons	-18.63366	1379.378	-0.01	0.989	-2722.164	2684.897

Logistic model for HP2probsoc

Classified	True D	True ~D	Total
+	27	4	31
-	12	185	197
Total	39	189	228

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	69.23%
Specificity	Pr(-|~D)	97.88%
Positive predictive value	Pr(D| +)	87.10%
Negative predictive value	Pr(~D| -)	93.91%
False + rate for true ~D	Pr(+|~D)	2.12%
False - rate for true D	Pr(-| D)	30.77%
False + rate for classified +	Pr(~D| +)	12.90%
False - rate for classified -	Pr(D| -)	6.09%
Correctly classified		92.98%

Logistic model for HP2probsoc, goodness-of-fit test

```
      number of observations =       228
 number of covariate patterns =       228
            Pearson chi2(193) =       730.19
                  Prob > chi2 =         0.0000
```

Measures of Fit for **logistic** of **HP2probsoc**

Log-Lik Intercept Only:	-104.322	Log-Lik Full Model:	-52.366
D(179):	104.732	LR(34):	103.912
		Prob > LR:	0.000
McFadden's R2:	0.498	McFadden's Adj R2:	0.028
Maximum Likelihood R2:	0.366	Cragg & Uhler's R2:	0.611
McKelvey and Zavoina's R2:	0.779	Efron's R2:	0.554
Variance of y*:	14.912	Variance of error:	3.290
Count R2:	0.930	Adj Count R2:	0.590
AIC:	0.889	AIC*n:	202.732
BIC:	-867.121	BIC':	80.686

Full main model for HP2probsoc for wave= 2

chunk 4 H1 test:Gender= 2 model Wave = 2 for HP2probsoc

```
i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 9 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
```

```
Logistic regression                               Number of obs   =        353
                                                  LR chi2(44)     =     173.44
                                                  Prob > chi2     =     0.0000
Log likelihood = -93.198778                       Pseudo R2       =     0.4820
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.1045505	.025349	4.12	0.000	.0548673	.1542337
_Ieduc_2	-12.29812	1030.765	-0.01	0.990	-2032.56	2007.964
_Ieduc_3	-12.54704	1030.765	-0.01	0.990	-2032.809	2007.715
_Ieduc_4	-11.69817	1030.765	-0.01	0.991	-2031.96	2008.564
_Ieduc_5	-11.74738	1030.765	-0.01	0.991	-2032.009	2008.515
_Ieduc_6	-12.89754	1030.765	-0.01	0.990	-2033.159	2007.364
_Ieduc_7	-14.11644	1030.817	-0.01	0.989	-2034.481	2006.248
_Ieduc_8	0	(omitted)				
occ1w2	-1.104757	3.60974	-0.31	0.760	-8.179718	5.970203

occ2w2	-1.202019	3.652886	-0.33	0.742	-8.361544	5.957506
occ3w2	.0703933	3.628444	0.02	0.985	-7.041227	7.182014
occ4w2	-1.52192	3.712086	-0.41	0.682	-8.797475	5.753635
occ5w2	-2.24588	3.84541	-0.58	0.559	-9.782745	5.290985
occ6w2	0	(omitted)				
occ7w2	-.4840598	3.61697	-0.13	0.894	-7.573191	6.605072
occ8w2	2.167215	3.89814	0.56	0.578	-5.472999	9.807428
marrw21	-.4201784	1.629029	-0.26	0.796	-3.613016	2.772659
marrw22	1.086175	1.72569	0.63	0.529	-2.296115	4.468466
marrw23	.7750978	.9250885	0.84	0.402	-1.038042	2.588238
marrw25	.532399	1.287582	0.41	0.679	-1.991215	3.056013
marrw26	0	(omitted)				
inc1w2	.0603839	3.624166	0.02	0.987	-7.042851	7.163619
inc2w2	.8383333	3.595272	0.23	0.816	-6.20827	7.884937
inc3w2	.536243	3.60018	0.15	0.882	-6.519981	7.592467
inc4w2	.2312155	3.842475	0.06	0.952	-7.299898	7.762329
radhlw2	.0147911	.0081819	1.81	0.071	-.0012451	.0308272
havmil	.0022418	.0072934	0.31	0.759	-.0120531	.0165366
avgcumdosew2	.4925829	.2091227	2.36	0.018	.0827098	.9024559
bf1	-.0161664	.0113442	-1.43	0.154	-.0384006	.0060677
bf4	-.2331375	.0505589	-4.61	0.000	-.332231	-.1340439
bf6	.0021871	.0094776	0.23	0.817	-.0163887	.0207629
bf7	-.0615381	.1064342	-0.58	0.563	-.2701454	.1470692
bf14	8.31e-06	.0000929	0.09	0.929	-.0001737	.0001903
bf15	0	(omitted)				
bf40	-.005756	.0971846	-0.06	0.953	-.1962344	.1847223
deaw2	-.0331928	.2378427	-0.14	0.889	-.499356	.4329704
dvcew2	1.930249	1.72923	1.12	0.264	-1.45898	5.319477
sepaw2	-1.211648	2.172861	-0.56	0.577	-5.470378	3.047082
accdw2	-.6584952	.7729357	-0.85	0.394	-2.173421	.8564309
movew2	-.3688091	.9599148	-0.38	0.701	-2.250208	1.512589
illw2	.0217672	.2703514	0.08	0.936	-.5081118	.5516462
shfamw2	-.0185511	.0084341	-2.20	0.028	-.0350816	-.0020206
shhlw2	.0005321	.0080879	0.07	0.948	-.0153199	.0163841
shjobw2	-.0024716	.0076938	-0.32	0.748	-.0175512	.0126079
shrelaw2	-.0052827	.0086543	-0.61	0.542	-.0222447	.0116794
suprtw2	.0005602	.0066528	0.08	0.933	-.012479	.0135994
suchrw2	-.0036935	.00718	-0.51	0.607	-.017766	.0103791
havmilsq	-8.46e-06	.0000154	-0.55	0.582	-.0000386	.0000217
_cons	6.917383	1030.768	0.01	0.995	-2013.35	2027.185

Note: 3 failures and 0 successes completely determined.

Logistic model for HP2probsoc

Classified	True D	True ~D	Total
+	**53**	**11**	**64**
-	**20**	**269**	**289**
Total	**73**	**280**	**353**

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	**72.60%**
Specificity	Pr(-|~D)	**96.07%**
Positive predictive value	Pr(D| +)	**82.81%**
Negative predictive value	Pr(~D| -)	**93.08%**
False + rate for true ~D	Pr(+|~D)	**3.93%**
False - rate for true D	Pr(-| D)	**27.40%**
False + rate for classified +	Pr(~D| +)	**17.19%**
False - rate for classified -	Pr(D| -)	**6.92%**
Correctly classified		**91.22%**

Logistic model for HP2probsoc, goodness-of-fit test

number of observations = **353**
number of covariate patterns = **353**
Pearson chi2(**308**) = **419.21**
Prob > chi2 = **0.0000**

Measures of Fit for **logistic** of **HP2probsoc**

Log-Lik Intercept Only:	**-179.919**	Log-Lik Full Model:	**-93.199**
D(304):	**186.398**	LR(44):	**173.440**
		Prob > LR:	**0.000**
McFadden's R2:	**0.482**	McFadden's Adj R2:	**0.210**
Maximum Likelihood R2:	**0.388**	Cragg & Uhler's R2:	**0.607**
McKelvey and Zavoina's R2:	**0.892**	Efron's R2:	**0.528**
Variance of y*:	**30.526**	Variance of error:	**3.290**
Count R2:	**0.912**	Adj Count R2:	**0.575**
AIC:	**0.806**	AIC*n:	**284.398**
BIC:	**-1597.009**	BIC':	**84.685**

```
621 .
622 . *-----Chunk 4 dose3 social problem impact--------------no sig dose main effe
    > ct--
623 . title4 "Male trimmed models of dose and HP2probsoc relationship in Wave 2"

    Male trimmed models of dose and HP2probsoc relationship in Wave 2


624 . * male models
625 .          forvalues j = 2/2 {
      2. set more off
      3. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
      4. title4 "trimmed HP2probsoc main effects models Wave 2 for H1 part 2 with
    > dose ns"
      5. title4 "Wave 2 dose HP2probsoc relationship but avgcumdosew`j': Dose not
    > signif"
      6. sw, pr(.1): logit HP2probsoc age radhlw2 accdw`j' `w`j'bf'  shjobw`j' ill
    > w`j' havmilsq ///
    >     avgcumdosew`j' shrelaw`j' if gender==1
      7.                          estat class
      8.                          estat gof
      9.                          fitstat
     10. }

    trimmed HP2probsoc main effects models Wave 2 for H1 part 2 with dose ns


    Wave 2 dose HP2probsoc relationship but avgcumdosew2: Dose not signif

    note: bf15 dropped because of collinearity
                          begin with full model
    p = 0.9688 >= 0.1000  removing havmilsq
    p = 0.8362 >= 0.1000  removing bf40
    p = 0.7569 >= 0.1000  removing bf1
    p = 0.4563 >= 0.1000  removing bf6
    p = 0.6327 >= 0.1000  removing bf7
    p = 0.3860 >= 0.1000  removing bf14
    p = 0.4368 >= 0.1000  removing illw2
    p = 0.3539 >= 0.1000  removing accdw2
    p = 0.2376 >= 0.1000  removing radhlw2
    p = 0.1378 >= 0.1000  removing avgcumdosew2

    Logistic regression                               Number of obs   =        332
                                                      LR chi2(4)      =      82.60
                                                      Prob > chi2     =     0.0000
    Log likelihood = -78.833798                       Pseudo R2       =     0.3438
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
age	.0571104	.0201616	2.83	0.005	.0175943	.0966265
bf4	-.2386201	.0424268	-5.62	0.000	-.321775	-.1554652
shjobw2	.0183809	.0063016	2.92	0.004	.0060301	.0307318
shrelaw2	-.0143444	.0067621	-2.12	0.034	-.0275978	-.0010909
_cons	-3.38883	1.393067	-2.43	0.015	-6.11919	-.6584689

Logistic model for HP2probsoc

	True		
Classified	D	~D	Total
+	18	6	24
-	21	287	308
Total	39	293	332

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	46.15%
Specificity	Pr(-|~D)	97.95%
Positive predictive value	Pr(D| +)	75.00%
Negative predictive value	Pr(~D| -)	93.18%
False + rate for true ~D	Pr(+|~D)	2.05%
False - rate for true D	Pr(-| D)	53.85%
False + rate for classified +	Pr(~D| +)	25.00%
False - rate for classified -	Pr(D| -)	6.82%
Correctly classified		91.87%

Logistic model for HP2probsoc, goodness-of-fit test

number of observations = **332**
number of covariate patterns = **315**
Pearson chi2(**310**) = **309.74**
Prob > chi2 = **0.4935**

Measures of Fit for **logit** of **HP2probsoc**

```
Log-Lik Intercept Only:     -120.135    Log-Lik Full Model:          -78.834
D(327):                      157.668    LR(4):                        82.603
                                        Prob > LR:                     0.000
McFadden's R2:                 0.344    McFadden's Adj R2:             0.302
Maximum Likelihood R2:         0.220    Cragg & Uhler's R2:            0.428
McKelvey and Zavoina's R2:     0.483    Efron's R2:                    0.343
Variance of y*:                6.358    Variance of error:             3.290
Count R2:                      0.919    Adj Count R2:                  0.308
AIC:                           0.505    AIC*n:                       167.668
BIC:                       -1740.612    BIC':                        -59.383

626 .
627 .
628 . scalar SigdoseMw2 = "none"

629 . scalar MainEffPrbsocMw2 = "age bf4 shjobw2 shrelaw2"

630 .
631 .
632 . forvalues j = 2/2 {
  2. title "trimmed HP2probsoc main effects models wave `j'" " for H1 part 2 w
> ith dose ns"
  3. title2 "Wave `j dose HP2work relationship but avgcumdosew`j': Dose not si
> gnif"
  4. }


*****************************************************************************
> *
*****************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****           trimmed HP2probsoc main effects models wave 2            ****
> *
*****                     for H1 part 2 with dose ns                     ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                      17 Jun 2012    10:06:58      ****
> *
*****************************************************************************
> *
*****************************************************************************
> *
```

```
title2: Wave `j dose HP2work relationship but avgcumdosew2: Dose not signif
                                        Date and time:  17 Jun 2012    10:06:58
                                        Working directory:  /Users/robertyaffee
> /Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2
                                        Stata data file:  chwide16june2012.dta
>  has  2384  variables and  703  observations

Wave `j dose HP2work relationship but avgcumdosew2: Dose not signif


633 .
634 . scalar MainEffPrbsocMw2 = "age radhlw2 shjobw2"

635 .
636 . foreach var in bf4 age radhlw2 shjobw2 shrelaw2 {
      2.  cap gen `var'Xd2= `var'*avgcumdosew2
      3.  }

637 .
638 . forvalues j = 2/2 {
      2.   set more off
      3.   title "Main effects Dose ProbSoc model for males"
      4.   logit HP2probsoc age avgcumdosew2 radhlw2 shjobw`j' ///
    >        ageXd2 radhlw2Xd2 shjobw2Xd2 shrelaw2Xd2 if gender==1
      5.                         estat class
      6.                         estat gof
      7.                         fitstat
      8. }


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                    ****
    > *
    *****                                                                    ****
    > *
    *****            Main effects Dose ProbSoc model for males               ****
    > *
    *****                                                                    ****
    > *
    *****                                                                    ****
    > *
    *****                                       17 Jun 2012    10:06:58      ****
    > *
```

```
********************************************************************************
> *
********************************************************************************
> *


Iteration 0:   log likelihood = -125.02372
Iteration 1:   log likelihood = -101.24332
Iteration 2:   log likelihood = -98.037905
Iteration 3:   log likelihood =  -95.91285
Iteration 4:   log likelihood = -95.749868
Iteration 5:   log likelihood = -95.696376
Iteration 6:   log likelihood = -95.696088
Iteration 7:   log likelihood = -95.696088

Logistic regression                               Number of obs   =        339
                                                  LR chi2(8)      =      58.66
                                                  Prob > chi2     =     0.0000
Log likelihood = -95.696088                       Pseudo R2       =     0.2346
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0770577	.0337156	2.29	0.022	.0109764	.1431391
avgcumdosew2	.0508309	3.097077	0.02	0.987	-6.019328	6.12099
radhlw2	.0197993	.0083366	2.37	0.018	.0034598	.0361387
shjobw2	.0098329	.0082287	1.19	0.232	-.0062951	.025961
ageXd2	-.0178912	.0446691	-0.40	0.689	-.1054409	.0696586
radhlw2Xd2	.0034014	.0089744	0.38	0.705	-.0141881	.0209909
shjobw2Xd2	.0078713	.0105502	0.75	0.456	-.0128068	.0285493
shrelaw2Xd2	-7.85e-06	.0047539	-0.00	0.999	-.0093253	.0093096
_cons	-7.732618	2.35884	-3.28	0.001	-12.35586	-3.109376

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2probsoc

	True		
Classified	D	~D	Total
+	10	1	11
-	31	297	328
Total	41	298	339

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   24.39%
Specificity                     Pr( -|~D)   99.66%
Positive predictive value       Pr( D| +)   90.91%
Negative predictive value       Pr(~D| -)   90.55%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    0.34%
False - rate for true D         Pr( -| D)   75.61%
False + rate for classified +   Pr(~D| +)    9.09%
False - rate for classified -   Pr( D| -)    9.45%
--------------------------------------------------
Correctly classified                        90.56%
--------------------------------------------------
```

Logistic model for HP2probsoc, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       328
             Pearson chi2(319) =       362.73
                   Prob > chi2 =         0.0461
```

Measures of Fit for **logit** of **HP2probsoc**

```
Log-Lik Intercept Only:     -125.024    Log-Lik Full Model:             -95.696
D(330):                      191.392    LR(8):                           58.655
                                        Prob > LR:                        0.000
McFadden's R2:                 0.235    McFadden's Adj R2:                0.163
Maximum Likelihood R2:         0.159    Cragg & Uhler's R2:               0.305
McKelvey and Zavoina's R2:     0.553    Efron's R2:                       0.224
Variance of y*:                7.356    Variance of error:                3.290
Count R2:                      0.906    Adj Count R2:                     0.220
AIC:                           0.618    AIC*n:                          209.392
BIC:                       -1731.188    BIC':                           -12.047
```

```
639 .
640 .
641 . *---- attempt to further trim
642 . scalar PrbsocModMw2 = "none"

643 .
644 . forvalues j = 2/2 {
  2.   logit HP2probsoc age  radhlw2 shjobw`j' shrelaw2 ///
>        avgcumdosew`j' ///
>         shjobw2Xd2 if gender==1
  3.                         estat class
  4.                         estat gof
  5.                         fitstat
  6. }

Iteration 0:   log likelihood = -125.02372
Iteration 1:   log likelihood = -101.95087
Iteration 2:   log likelihood = -97.334386
Iteration 3:   log likelihood = -95.853426
Iteration 4:   log likelihood = -95.386285
Iteration 5:   log likelihood = -95.343931
Iteration 6:   log likelihood = -95.343899
Iteration 7:   log likelihood = -95.343899

Logistic regression                               Number of obs   =        339
                                                  LR chi2(6)      =      59.36
                                                  Prob > chi2     =     0.0000
Log likelihood = -95.343899                       Pseudo R2       =     0.2374
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0661146	.0169659	3.90	0.000	.032862	.0993672
radhlw2	.0238012	.0061541	3.87	0.000	.0117394	.0358631
shjobw2	.0124131	.0072366	1.72	0.086	-.0017703	.0265965
shrelaw2	-.0074078	.0056539	-1.31	0.190	-.0184892	.0036736
avgcumdosew2	-.8016641	.6668355	-1.20	0.229	-2.108638	.5053095
shjobw2Xd2	.0088782	.0069242	1.28	0.200	-.0046931	.0224494
_cons	-7.291581	1.220643	-5.97	0.000	-9.683998	-4.899164

```
Note: 1 failure and 0 successes completely determined.

Logistic model for HP2probsoc
```

Classified	True D	True ~D	Total
+	**9**	**3**	**12**
-	**32**	**295**	**327**
Total	**41**	**298**	**339**

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	**21.95%**
Specificity	Pr(-|~D)	**98.99%**
Positive predictive value	Pr(D| +)	**75.00%**
Negative predictive value	Pr(~D| -)	**90.21%**
False + rate for true ~D	Pr(+|~D)	**1.01%**
False - rate for true D	Pr(-| D)	**78.05%**
False + rate for classified +	Pr(~D| +)	**25.00%**
False - rate for classified -	Pr(D| -)	**9.79%**
Correctly classified		**89.68%**

Logistic model for HP2probsoc, goodness-of-fit test

number of observations = **339**
number of covariate patterns = **328**
Pearson chi2(**321**) = **347.28**
Prob > chi2 = **0.1501**

Measures of Fit for **logit** of **HP2probsoc**

Log-Lik Intercept Only:	**-125.024**	Log-Lik Full Model:	**-95.344**
D(332):	**190.688**	LR(6):	**59.360**
		Prob > LR:	**0.000**
McFadden's R2:	**0.237**	McFadden's Adj R2:	**0.181**
Maximum Likelihood R2:	**0.161**	Cragg & Uhler's R2:	**0.308**
McKelvey and Zavoina's R2:	**0.517**	Efron's R2:	**0.220**
Variance of y*:	**6.815**	Variance of error:	**3.290**
Count R2:	**0.897**	Adj Count R2:	**0.146**
AIC:	**0.604**	AIC*n:	**204.688**
BIC:	**-1743.544**	BIC':	**-24.404**

```
645 . scalar SigDoseProbsocMw2 = "no"

646 . * xx  no signific radhwl3 by dose effect
647 . * xx  for males no signif dose social problem effect
648 . * xx  for males no significant moderator in dose social problem effect
649 . scalar ProbSocModMw2 = "none"

650 . * female models
651 .
652 .
653 . scalar SigDoseProbsocFw2 = "yes"

654 . scalar MainEffProbSocFw2 = "age radhlw2 avgcumdosew2 bf4"

655 .
656 .
657 .
658 . title4 "H1 pt2 wave 2 trimmed female moderator model with basis functions"
    ------------------------------------------------------------------------------

    H1 pt2 wave 2 trimmed female moderator model with basis functions
    ------------------------------------------------------------------------------


659 . forvalues j = 2/2 {
      2. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
      3. title "trimmed HP2probsoc main effects models Wave 2 for H1 part 2 " "Dos
    > e is signif Females"
      4. title "Wave 2 dose HP2probsoc relationship but avgcumdosew`j': Dose signi
    > f"
      5. sw, pr(.1): logit HP2probsoc age radhlw2  illw`j' `w2bf' ////
    >   shrelaw`j' avgcumdosew`j' if gender==2
      6.                          estat class
      7.                          estat gof
      8.                          fitstat
      9. }


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                    ****
    > *
    *****                                                                    ****
    > *
    *****    trimmed HP2probsoc main effects models Wave 2 for H1 part 2      ****
    > *
    *****                     Dose is signif Females                         ****
    > *
    *****                                                                    ****
```

```
> *
*****                                                                   ****
> *
*****                                               17 Jun 2012    10:07:01  ****
> *
*****************************************************************************
> *
*****************************************************************************
> *



*****************************************************************************
> *
*****************************************************************************
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
***** Wave 2 dose HP2probsoc relationship but avgcumdosew2: Dose signif   ****
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****                                               17 Jun 2012    10:07:01  ****
> *
*****************************************************************************
> *
*****************************************************************************
> *


note: bf15 dropped because of collinearity
                      begin with full model
p = 0.9211 >= 0.1000  removing illw2
p = 0.7587 >= 0.1000  removing bf14
p = 0.5303 >= 0.1000  removing bf40
p = 0.4770 >= 0.1000  removing bf7
p = 0.3763 >= 0.1000  removing bf1
p = 0.2334 >= 0.1000  removing bf6

Logistic regression                               Number of obs   =        363
                                                  LR chi2(5)      =     148.64
                                                  Prob > chi2     =     0.0000
Log likelihood =  -109.2514                       Pseudo R2       =     0.4049
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0970773	.0185105	5.24	0.000	.0607973	.1333572
radhlw2	.0147041	.0057226	2.57	0.010	.003488	.0259202
avgcumdosew2	.4069203	.1523059	2.67	0.008	.1084062	.7054343
shrelaw2	-.0147018	.005883	-2.50	0.012	-.0262323	-.0031712
bf4	-.1790113	.0368313	-4.86	0.000	-.2511993	-.1068232
_cons	-6.193984	1.259936	-4.92	0.000	-8.663413	-3.724554

Logistic model for HP2probsoc

Classified	True D	~D	Total
+	45	10	55
-	29	279	308
Total	74	289	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	60.81%
Specificity	Pr(-|~D)	96.54%
Positive predictive value	Pr(D| +)	81.82%
Negative predictive value	Pr(~D| -)	90.58%
False + rate for true ~D	Pr(+|~D)	3.46%
False - rate for true D	Pr(-| D)	39.19%
False + rate for classified +	Pr(~D| +)	18.18%
False - rate for classified -	Pr(D| -)	9.42%
Correctly classified		89.26%

Logistic model for HP2probsoc, goodness-of-fit test

```
       number of observations =       363
 number of covariate patterns =       362
            Pearson chi2(356) =       416.51
                  Prob > chi2 =         0.0148
```

Measures of Fit for **logit** of **HP2probsoc**

```
    Log-Lik Intercept Only:     -183.570     Log-Lik Full Model:          -109.251
    D(357):                      218.503     LR(5):                        148.637
                                             Prob > LR:                      0.000
    McFadden's R2:                 0.405     McFadden's Adj R2:              0.372
    Maximum Likelihood R2:         0.336     Cragg & Uhler's R2:             0.528
    McKelvey and Zavoina's R2:     0.585     Efron's R2:                     0.450
    Variance of y*:                7.926     Variance of error:              3.290
    Count R2:                      0.893     Adj Count R2:                   0.473
    AIC:                           0.635     AIC*n:                        230.503
    BIC:                       -1885.799     BIC':                        -119.165

660 .
661 . foreach var in b4 shrelaw2  {
      2.  cap   gen `var'Xd2 = `var'*avgcumdosew2
      3. }

662 .
663 . * testing the female moderator model with basis functions
664 . forvalues j = 2/2 {
      2. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
      3. title "trimmed HP2socprob main effects  wv 3 for Hyp1 pt 2" "dose is sign
    > if for females"
      4. title "Wave 2 dose HP2socprob relationship but avgcumdosew`j'" " Dose is
    > signif for females"
      5. sw, pr(.1): logit HP2probsoc age radhlw2  illw`j' `w2bf' ////
    >   shrelaw`j' avgcumdosew`j' b4Xd2 shrelaw2Xd2 ///
    >     if gender==2
      6.                          estat class
      7.                          estat gof
      8.                          fitstat
      9. }


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****        trimmed HP2socprob main effects  wv 3 for Hyp1 pt 2          ****
    > *
    *****                     dose is signif for females                      ****
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
```

```
*****                                              17 Jun 2012    10:07:11  ****
> *
********************************************************************************
> *
********************************************************************************
> *



********************************************************************************
> *
********************************************************************************
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****       Wave 2 dose HP2socprob relationship but avgcumdosew2           ****
> *
*****                   Dose is signif for females                          ****
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****                                              17 Jun 2012    10:07:11  ****
> *
********************************************************************************
> *
********************************************************************************
> *


note: bf15 dropped because of collinearity
                      begin with full model
p = 0.9632 >= 0.1000  removing illw2
p = 0.8198 >= 0.1000  removing bf14
p = 0.7254 >= 0.1000  removing b4Xd2
p = 0.5552 >= 0.1000  removing shrelaw2
p = 0.5003 >= 0.1000  removing bf40
p = 0.4569 >= 0.1000  removing bf7
p = 0.2462 >= 0.1000  removing bf1
p = 0.1474 >= 0.1000  removing bf6
```

```
Logistic regression                             Number of obs   =        363
                                                LR chi2(5)      =     149.39
                                                Prob > chi2     =     0.0000
Log likelihood = -108.87292                     Pseudo R2       =     0.4069
```

HP2probsoc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0975313	.0188222	5.18	0.000	.0606406	.1344221
radhlw2	.0162388	.0058329	2.78	0.005	.0048066	.027671
shrelaw2Xd2	-.0116334	.0048733	-2.39	0.017	-.0211849	-.002082
avgcumdosew2	.9243072	.3378348	2.74	0.006	.2621633	1.586451
bf4	-.1705368	.0357567	-4.77	0.000	-.2406188	-.1004549
_cons	-6.899952	1.254724	-5.50	0.000	-9.359167	-4.440737

Logistic model for HP2probsoc

Classified	True D	True ~D	Total
+	45	11	56
-	29	278	307
Total	74	289	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2probsoc != 0

Sensitivity	Pr(+| D)	60.81%
Specificity	Pr(-|~D)	96.19%
Positive predictive value	Pr(D| +)	80.36%
Negative predictive value	Pr(~D| -)	90.55%
False + rate for true ~D	Pr(+|~D)	3.81%
False - rate for true D	Pr(-| D)	39.19%
False + rate for classified +	Pr(~D| +)	19.64%
False - rate for classified -	Pr(D| -)	9.45%
Correctly classified		88.98%

Logistic model for HP2probsoc, goodness-of-fit test

```
       number of observations =       363
 number of covariate patterns =       362
            Pearson chi2(356) =       411.50
                  Prob > chi2 =         0.0225

Measures of Fit for logit of HP2probsoc

Log-Lik Intercept Only:     -183.570     Log-Lik Full Model:           -108.873
D(357):                      217.746     LR(5):                         149.394
                                         Prob > LR:                       0.000
McFadden's R2:                 0.407     McFadden's Adj R2:               0.374
Maximum Likelihood R2:         0.337     Cragg & Uhler's R2:              0.530
McKelvey and Zavoina's R2:     0.616     Efron's R2:                      0.452
Variance of y*:                8.560     Variance of error:               3.290
Count R2:                      0.890     Adj Count R2:                    0.459
AIC:                           0.633     AIC*n:                         229.746
BIC:                       -1886.556     BIC':                         -119.922

665 .
666 . scalar ProbsocModFw2 = "none"

667 .
668 .
669 . title4 "H1 pt 2 wave 2 testing for mediators for males"
-------------------------------------------------------------------------------
H1 pt 2 wave 2 testing for mediators for males
-------------------------------------------------------------------------------

670 . * Male mediator dose social problem response models
671 .
672 .
673 .
674 . // age is a male mediator
675 . glm age avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1330.6004

Generalized linear models                          No. of obs      =        340
Optimization     : ML                              Residual df     =        338
                                                   Scale parameter =   147.6853
Deviance         =  49917.64009                    (1/df) Deviance =   147.6853
Pearson          =  49917.64009                    (1/df) Pearson  =   147.6853

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   7.838826
Log likelihood   =   -1330.6004                    BIC             =   47947.46
```

age	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	.5832314	.2635871	2.21	0.027	.0666101	1.099853
_cons	48.62133	.7061562	68.85	0.000	47.23729	50.00537

```
676 . glm HP2probsoc age if gender==1, fam(bin) irls link(probit) scale(dev)

    Iteration 1:   deviance =  230.0069
    Iteration 2:   deviance =  223.5454
    Iteration 3:   deviance =  223.2469
    Iteration 4:   deviance =  223.2456
    Iteration 5:   deviance =  223.2456

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        338
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  223.2456447                    (1/df) Deviance =   .6604901
    Pearson          =  331.0340472                    (1/df) Pearson  =   .9793907

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1746.938
```

HP2probsoc	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0392343	.0064286	6.10	0.000	.0266344	.0518342
_cons	-3.234772	.3587306	-9.02	0.000	-3.937871	-2.531673

(Standard errors scaled using square root of deviance-based dispersion.)

677 .

```
678 . glm radhlw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1693.4076

    Generalized linear models                          No. of obs      =        340
    Optimization     : ML                              Residual df     =        338
                                                       Scale parameter =   1247.933
    Deviance         =  421801.4584                    (1/df) Deviance =   1247.933
    Pearson          =  421801.4584                    (1/df) Pearson  =   1247.933

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   9.972986
    Log likelihood   = -1693.407647                    BIC             =   419831.3

    ------------------------------------------------------------------------------
                 |                 OIM
         radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   1.220373    .766216     1.59   0.111    -.2813831    2.722128
           _cons |   45.63198   2.052711    22.23   0.000     41.60874    49.65522
    ------------------------------------------------------------------------------

679 . glm HP2probsoc radhlw2 if gender==1,fam(bin) irls link(probit) scale(dev)

    Iteration 1:   deviance =  226.5911
    Iteration 2:   deviance =  218.8478
    Iteration 3:   deviance =  218.3822
    Iteration 4:   deviance =  218.3787
    Iteration 5:   deviance =  218.3787

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        338
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =   218.378733                    (1/df) Deviance =   .6460909
    Pearson          =  326.2667817                    (1/df) Pearson  =   .9652863

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1751.805
```

```
--------------------------------------------------------------------------------
             |                 EIM
  HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+------------------------------------------------------------------
     radhlw2 |   .0149459   .0022581     6.62   0.000     .0105201    .0193717
       _cons |  -2.034921   .1640547   -12.40   0.000    -2.356462    -1.71338
--------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

680 .
681 . glm shjobw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1730.3274

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  1550.634
Deviance         =  524114.2615                    (1/df) Deviance =  1550.634
Pearson          =  524114.2615                    (1/df) Pearson  =  1550.634

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  10.19016
Log likelihood   = -1730.327396                    BIC             =  522144.1

--------------------------------------------------------------------------------
             |                 OIM
     shjobw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+------------------------------------------------------------------
avgcumdosew2 |   .7146559   .8541028     0.84   0.403    -.9593549    2.388667
       _cons |   49.09491   2.288162    21.46   0.000     44.61019    53.57962
--------------------------------------------------------------------------------

682 . glm HP2probsoc shjobw2 if gender==1,fam(bin) irls link(probit) scale(dev)

Iteration 1:   deviance =  241.5668
Iteration 2:   deviance =  238.4954
Iteration 3:   deviance =   238.438
Iteration 4:   deviance =   238.438
Iteration 5:   deviance =   238.438

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       338
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  238.4379517                    (1/df) Deviance =  .7054377
Pearson          =  344.7520389                    (1/df) Pearson  =  1.019976
```

```
Variance function: V(u) = u*(1-u)                [Bernoulli]
Link function    : g(u) = invnorm(u)             [Probit]

                                                 BIC             = -1731.746

------------------------------------------------------------------------------
             |                 EIM
  HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     shjobw2 |   .0079142   .0019981     3.96   0.000      .003998    .0118303
       _cons |  -1.622345   .1436613   -11.29   0.000    -1.903915   -1.340774
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)
```

683 .

684 . glm shrelaw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

```
Iteration 0:   log likelihood = -1686.1612

Generalized linear models                        No. of obs      =        339
Optimization     : ML                            Residual df     =        337
                                                 Scale parameter =   1231.384
Deviance         =   414976.438                  (1/df) Deviance =   1231.384
Pearson          =   414976.438                  (1/df) Pearson  =   1231.384

Variance function: V(u) = 1                      [Gaussian]
Link function    : g(u) = u                      [Identity]

                                                 AIC             =   9.959653
Log likelihood   =  -1686.16125                  BIC             =   413013.1

------------------------------------------------------------------------------
             |                 OIM
    shrelaw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .6230115   .7612097     0.82   0.413     -.868932    2.114955
       _cons |   26.21356   2.042278    12.84   0.000     22.21077    30.21635
------------------------------------------------------------------------------
```

```
685 . glm HP2probsoc shrelaw2 if gender==1,fam(bin) irls link(probit) scale(dev)

    Iteration 1:   deviance =  247.6569
    Iteration 2:   deviance =  246.6168
    Iteration 3:   deviance =   246.614
    Iteration 4:   deviance =   246.614

    Generalized linear models                          No. of obs      =       339
    Optimization     : MQL Fisher scoring              Residual df     =       337
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  246.6140476                    (1/df) Deviance =  .7317924
    Pearson          =  341.2333206                    (1/df) Pearson  =  1.012562

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1716.748

    ------------------------------------------------------------------------------
                 |                 EIM
      HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
        shrelaw2 |   .0043873   .0020436     2.15   0.032     .0003819    .0083926
           _cons |  -1.301708   .0997015   -13.06   0.000    -1.497119   -1.106297
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

686 .
687 . glm radhlw2 shjobw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1684.8126

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       337
                                                       Scale parameter =  1189.928
    Deviance         =  401005.7796                    (1/df) Deviance =  1189.928
    Pearson          =  401005.7796                    (1/df) Pearson  =  1189.928

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   9.92831
    Log likelihood   = -1684.812637                    BIC             =  399041.4
```

radhlw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
shjobw2	.1991928	.0476483	4.18	0.000	.1058038	.2925817
avgcumdosew2	1.078018	.7489714	1.44	0.150	-.3899386	2.545975
_cons	35.85263	3.080591	11.64	0.000	29.81478	41.89047

```
688 . glm HP2probsoc shjobw2 avgcumdosew2 shjobw2Xd2 radhlw2 if gender==1,fam(bin)
    >  ///
    >    irls scale(dev) link(probit)

    Iteration 1:   deviance =  220.8951
    Iteration 2:   deviance =  210.5288
    Iteration 3:   deviance =  208.6963
    Iteration 4:   deviance =  208.3623
    Iteration 5:   deviance =  208.3262
    Iteration 6:   deviance =  208.3254
    Iteration 7:   deviance =  208.3254
    Iteration 8:   deviance =  208.3254

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        335
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  208.3253662                    (1/df) Deviance =   .6218668
    Pearson          =  303.1137306                    (1/df) Pearson  =   .9048171

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1744.371
```

HP2probsoc	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
shjobw2	.0028813	.0028376	1.02	0.310	-.0026803	.008443
avgcumdosew2	-.4311286	.2898739	-1.49	0.137	-.999271	.1370138
shjobw2Xd2	.0049627	.0030471	1.63	0.103	-.0010095	.0109349
radhlw2	.0146066	.0023358	6.25	0.000	.0100285	.0191848
_cons	-2.096189	.2712131	-7.73	0.000	-2.627757	-1.564621

(Standard errors scaled using square root of deviance-based dispersion.)

```
689 .
690 . scalar ProbsocMedMw2 = "age"

691 .
692 . title4 "H1 pt2 wave 2 HP2probsoc female mediator tests"
    ------------------------------------------------------------------------------
    H1 pt2 wave 2 HP2probsoc female mediator tests
    ------------------------------------------------------------------------------

693 .
694 . // age is a possible female mediator
695 . glm age avgcumdosew2 if gender==2, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1406.9403

    Generalized linear models                          No. of obs      =       363
    Optimization     : ML                              Residual df     =       361
                                                       Scale parameter =  136.9184
    Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
    Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  7.762756
    Log likelihood   = -1406.940271                    BIC             =  47299.65

    ------------------------------------------------------------------------------
                 |                 OIM
             age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
           _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
    ------------------------------------------------------------------------------

696 . glm HP2probsoc age if gender==2, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =  289.3253
    Iteration 2:   deviance =  280.9528
    Iteration 3:   deviance =  280.5176
    Iteration 4:   deviance =  280.5162
    Iteration 5:   deviance =  280.5162

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  280.5161869                    (1/df) Deviance =  .7770531
    Pearson          =  406.2926804                    (1/df) Pearson  =  1.125464
```

```
Variance function: V(u) = u*(1-u)                    [Bernoulli]
Link function    : g(u) = invnorm(u)                 [Probit]

                                                     BIC             = -1847.363

------------------------------------------------------------------------------
             |                 EIM
  HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0683554    .007474     9.15   0.000     .0537067     .083004
       _cons |  -4.505136    .424587   -10.61   0.000    -5.337311   -3.672961
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

.
. // radhlw2 is a possible female mediator
. glm radhlw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1791.2233

Generalized linear models                            No. of obs      =       363
Optimization     : ML                                Residual df     =       361
                                                     Scale parameter =  1137.567
Deviance         =  410661.5604                      (1/df) Deviance =  1137.567
Pearson          =  410661.5604                      (1/df) Pearson  =  1137.567

Variance function: V(u) = 1                          [Gaussian]
Link function    : g(u) = u                          [Identity]

                                                     AIC             =  9.880018
Log likelihood   = -1791.223306                      BIC             =  408533.7

------------------------------------------------------------------------------
             |                 OIM
     radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   3.302288   1.283833     2.57   0.010     .7860214    5.818555
       _cons |   56.95167   2.110863    26.98   0.000     52.81445    61.08888
------------------------------------------------------------------------------
```

```
700 . glm HP2probsoc radhlw2 if gender==2,fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =   335.706
    Iteration 2:   deviance =  333.7569
    Iteration 3:   deviance =  333.7467
    Iteration 4:   deviance =  333.7467
    Iteration 5:   deviance =  333.7467

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  333.7467432                    (1/df) Deviance =  .9245062
    Pearson          =  373.5069806                    (1/df) Pearson  =  1.034645

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1794.133

    ------------------------------------------------------------------------------
                 |                 EIM
      HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
         radhlw2 |   .0135849    .002393     5.68   0.000     .0088947    .0182751
           _cons |  -1.729418   .1840212    -9.40   0.000    -2.090093   -1.368743
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

701 .
702 . // bf4 is a possible female mediator
703 . glm bf4 avgcumdosew2 if gender==2, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1109.0983

    Generalized linear models                          No. of obs      =       363
    Optimization     : ML                              Residual df     =       361
                                                       Scale parameter =  26.53281
    Deviance         =  9578.344971                    (1/df) Deviance =  26.53281
    Pearson          =  9578.344971                    (1/df) Pearson  =  26.53281

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  6.121754
    Log likelihood   = -1109.098281                    BIC             =  7450.466
```

bf4	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**-.595012**	**.1960703**	**-3.03**	**0.002**	**-.9793027**	**-.2107212**
_cons	**11.02048**	**.3223763**	**34.19**	**0.000**	**10.38863**	**11.65232**

```
704 . glm HP2probsoc bf4 if gender==2,fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  295.3213
Iteration 2:   deviance =  289.8751
Iteration 3:   deviance =  289.6607
Iteration 4:   deviance =  289.6591
Iteration 5:   deviance =  289.6591
Iteration 6:   deviance =  289.6591

Generalized linear models                          No. of obs      =       363
Optimization     : MQL Fisher scoring              Residual df     =       361
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  289.6591069                    (1/df) Deviance =  .8023798
Pearson          =  306.7680355                    (1/df) Pearson  =   .849773

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             =  -1838.22
```

HP2probsoc	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.1364145**	**.0148745**	**-9.17**	**0.000**	**-.165568**	**-.107261**
_cons	**.3956217**	**.1443369**	**2.74**	**0.006**	**.1127267**	**.6785167**

(Standard errors scaled using square root of deviance-based dispersion.)

```
705 .
706 . glm shrelaw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1767.2727

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        361
                                                       Scale parameter =   996.9369
    Deviance         =   359894.211                    (1/df) Deviance =   996.9369
    Pearson          =   359894.211                    (1/df) Pearson  =   996.9369

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   9.748059
    Log likelihood   = -1767.272695                    BIC             =   357766.3

    ------------------------------------------------------------------------------
                 |                 OIM
        shrelaw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |   1.945314    1.20186     1.62   0.106    -.4102891    4.300917
           _cons |   22.64351   1.976084    11.46   0.000     18.77046    26.51657
    ------------------------------------------------------------------------------

707 . glm HP2probsoc shrelaw2 bf4 if gender==2,fam(bin) irls scale(dev) link(probi
    > t)

    Iteration 1:   deviance =  289.2064
    Iteration 2:   deviance =   281.788
    Iteration 3:   deviance =  281.4059
    Iteration 4:   deviance =  281.4028
    Iteration 5:   deviance =  281.4028
    Iteration 6:   deviance =  281.4028

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        360
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  281.4028288                    (1/df) Deviance =   .7816745
    Pearson          =  310.3983516                    (1/df) Pearson  =   .8622176

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1840.582
```

```
----------------------------------------------------------------------------------
             |                 EIM
  HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+--------------------------------------------------------------------
    shrelaw2 |  -.0081327   .0026244    -3.10   0.002    -.0132764    -.002989
         bf4 |  -.1491375    .015739    -9.48   0.000    -.1799854   -.1182895
       _cons |   .6945159   .1749292     3.97   0.000      .351661    1.037371
----------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

708 .
709 .
710 . // shjobw2Xd2 is almost significant but not quite
711 . glm radhlw2 shjobw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1791.1332

Generalized linear models                          No. of obs      =        363
Optimization     : ML                              Residual df     =        360
                                                   Scale parameter =    1140.16
Deviance         =  410457.7613                    (1/df) Deviance =    1140.16
Pearson          =  410457.7613                    (1/df) Pearson  =    1140.16

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   9.885031
Log likelihood   = -1791.133211                    BIC             =   408335.8

----------------------------------------------------------------------------------
             |                 OIM
     radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+--------------------------------------------------------------------
     shjobw2 |  -.0191223   .0452294    -0.42   0.672    -.1077704    .0695258
avgcumdosew2 |   3.347309     1.2897     2.60   0.009      .819544    5.875074
       _cons |   57.93542    3.14326    18.43   0.000     51.77474    64.09609
----------------------------------------------------------------------------------
```

```
712 . glm HP2probsoc shjobw2 avgcumdosew2 shjobw2Xd2  if gender==2,fam(bin) irls s
    > cale(dev) link(probit)

    Iteration 1:   deviance =  337.4422
    Iteration 2:   deviance =  332.2358
    Iteration 3:   deviance =  329.0807
    Iteration 4:   deviance =  328.8969
    Iteration 5:   deviance =   328.895
    Iteration 6:   deviance =   328.895
    Iteration 7:   deviance =   328.895

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        359
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  328.8950257                    (1/df) Deviance =   .9161421
    Pearson          =  356.7664651                    (1/df) Pearson  =   .9937785

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1787.196

    ------------------------------------------------------------------------------
                 |                 EIM
      HP2probsoc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
         shjobw2 |   .0053961   .0034194     1.58   0.115    -.0013058    .0120979
    avgcumdosew2 |   1.437383   .3964978     3.63   0.000     .6602614    2.214504
      shjobw2Xd2 |  -.0121765   .0040881    -2.98   0.003    -.0201891    -.004164
           _cons |  -1.737153   .2989256    -5.81   0.000    -2.323036   -1.151269
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

713 .
714 . scalar ProbsocMedFw2 = "age bf4 radhlw2"

715 .
```

```
. 
. * male hp2spM w2  mediators: age
. * dose is not significant main effect for males
. * female hp2spF w2 mediators: age radhlw2
. * dose is not sig main effect for males
. 
. scalar SigDoseProbsocMw2 = "no"

. 
. 
. 
. title4 "3. Matrix summary for H1 pt2 wave 2 HP2probsoc Impact"
  ─────────────────────────────────────────────────────────────────────────────
  3. Matrix summary for H1 pt2 wave 2 HP2probsoc Impact
  ─────────────────────────────────────────────────────────────────────────────

.     matrix define  spMw2 = J(1,8, 0)

.         matrix define  spFw2 = J(1,8, 0)

. matrix colnames  spMw2=  hypnum ptnum wave gender medsig numMAsig numModsig
> numMed

. matrix colnames  spFw2=  hypnum ptnum wave gender medsig numMAsig numModsig
> numMed

. 
.         matrix define  spMw2= (1, 2, 3, 1, 0, 4, 0, 1 )

.         matrix define  spFw2= (1, 2, 3, 2, 1, 5, 0, 3 )

.     matrix rowname  spMw2 =  spMw2

.         matrix rowname  spFw2 =  spFw2

.         matlist  spMw2

             |        c1          c2          c3          c4          c5          c
> 6          c7          c8
-------------+-----------------------------------------------------------------------
> ------------------------
       spMw2 |         1           2           3           1           0
> 4           0           1
```

```
737 .         matlist  spFw2

                 |         c1          c2          c3          c4          c5          c
    > 6          c7          c8
    ---------------+-------------------------------------------------------------------------------
    > --------------------------
            spFw2 |          1           2           3           2           1
    > 5           0           3

738 .         matrix define H1pt2w2 = (  wkMw2 \  wkFw2 \  hmcrMw2 \  hmcrFw2 \  s
    > pMw2 \  spFw2 )

739 .
740 .         matlist H1pt2w2

                 |         c1          c2          c3          c4          c5          c
    > 6          c7          c8
    ---------------+-------------------------------------------------------------------------------
    > --------------------------
               r1 |          1           2           2           1           0
    > 2           0           2
               r1 |          1           2           2           2           0
    > 1           0           2
               r1 |          1           2           3           1           0
    > 1           0           1
               r1 |          1           2           3           2           1
    > 1           0           2
            spMw2 |          1           2           3           1           0
    > 4           0           1
            spFw2 |          1           2           3           2           1
    > 5           0           3

741 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
    > odsig numMed

742 .     matrix rownames H1pt2w2 =   wkMw2 wkFw2 hmcrMw2 hmcrFw2 socprbMw2 socprb
    > Fw2
```

```
743 .     matlist H1pt2w2

             |    hypnum      ptnum       wave     gender      medsig   numMAsi
    > g  numModsig     numMed
    -------------+------------------------------------------------------------------
    > ------------------------
         wkMw2 |         1          2          2          1           0
    > 2          0          2
         wkFw2 |         1          2          2          2           0
    > 1          0          2
       hmcrMw2 |         1          2          3          1           0
    > 1          0          1
       hmcrFw2 |         1          2          3          2           1
    > 1          0          2
     socprbMw2 |         1          2          3          1           0
    > 4          0          1
     socprbFw2 |         1          2          3          2           1
    > 5          0          3

744 .
745 .
746 . *xx  significant dose effect for females
747 . scalar ProbsocModFw2 = "none"

748 . *xx  no female moderators for Dose Social problem impact relationship
749 . scalar list
    MainEffPrbsocMw2 = age radhlw2 shjobw2
    MainEffhmcrFw2 = age
    hmcrMedFw2 = age bf4
    MainEffwkFw2 = age
    MainEffwkMw2 = age
    inthobMedMw2 = age
     inthobMw2 = age
    sxlifeMedMw2 = age illw2
    SigDoseSxlifeFw2 = no
    MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
    PrbfmhmModMw2 = none
    MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
    hmcrModMw2 = none
    MainEffhmcrMw2 = age
      wkMedFw2 = age b4
      wkMedMw2 = age bf4
    MainEffVactnMw2 = age radhlw2
    MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
    MainEffPrbfmhmMw2 = bf4 bf6 bf7
    ProbsocMedFw2 = age bf4 radhlw2
    hmcareMedFw2 = age bf4
     WkhmcrMw2 = age b4
    MainEffhmcrw2 = age
```

hmcrModFw2 = **none**
SigDoseHmcrFw2 = **yes**
NumhmcrModMw2 = **none**
SigDosehmcrMw2 = **no**
SigdosehmcrFw2 = **yes**
hmcrMedMw2 = **age ageXillw2**
SigDosehmcrFw2 = **no**
MainEffhmcareMw2 = **age**
  WkMedMw2 = **age ageXillw2**
  wkMedFw3 = **radhlw3 age ageXillw3 bf40 bf4m bf1**
VactnMedFw2 = **age illw2 radhlw2**
VactnMedMw2 = **age illw2**
VacatnModFw2 = **none**
MainEffVactnFw2 = **age radhlw2 bf7m**
SigDoseVactnFw2 = **no**
VactnModMw2 = **none**
vactnModMw2 = **none**
SigDoseVactnMw2 = **no**
inthobMedFw2 = **age bf4 illw2 bf4m**
InthbModFw2 = **none**
MainEffInthbFw2 = **age radhlw2 bf4**
SigdoseInthbFw2 = **no**
InthbModMw2 = **none**
MainEffInthbMw2 = **age radhlw2 shfamw2**
SigDoseInthbMw2 = **no**
MainEffMw2 = **radhlw2 bf4 bf40**
SigdoseMEinthob = **no**
sxlifeMedFw2 = **age illw2 radhlw2 bf4 bf4m**
SxLifeModFw2 = **no**
sxlifeModFw2 = **none**
sxlifeModMw2 = **none**
SigDosesxlifeMw2 = **no**
PrbfmhmMedFw2 = **age bf4**
PrbfmhmMedMw2 = **age**
PrbfmhmModFw2 = **none**
MainEffPrbfmhmFw2 = **age bf4 bf40**
SigDosePrbfmhmFw2 = **no**
PrbfmhmModw2 = **none**
SigDosePrbfmhmMw2 = **no**
SigDosePrbfhmMw2 = **no**
MainEffPrbfhmMw2 = **bf4 bf6 bf7**
ProbsocMedMw2 = **age**
ProbsocModFw2 = **none**
SigDoseProbsocFw2 = **yes**
ProbSocModMw2 = **none**
SigDoseProbsocMw2 = **no**
PrbsocModMw2 = **none**
SigdoseMw2 = **none**
hmcareMedMw2 = **age**

```
hmcareModFw2 = none
MainEffhmcarew2 = age
SigdoseHmcareFw2 = no
hmcareModMw2 = none
SigDoseHmcareMw2 = no
NameMedMw2 = age ageXillw2
 NumModMw2 = none
SigDosehmcareMw2 = no
SigDoseWKMw2 = no
  WkMedFw2 = age bf4
  WkModFw2 = none
  WKModMw2 = none
SigDoseWkMw2 = no
SigDoseWkFw2 = no
SigDoseFw2 = no
  wkModFw2 = none
  wkModMw2 = none
VactnMedFw3 = age illw3 radhlw3
VactnMedMw3 = age illw3
VacatnModFw3 = none
MainEffVactnFw3 = age radhlw3 deaw3
SigDoseVactnFw3 = no
vactnModMw3 = none
MainEffVactnMw3 = age bf7m radhlw3
SigDoseVactnMw3 = no
sxLifeMedFw3 = age bf4 bf4m
sxLifeMedMw3 = age illw3
InthbModFw3 = none
MainEffInthbFw3 = age radhlw3 bf4
SigdoseInthbFw3 = no
  InthbMw3 = none
MainEffInthbMw3 = age radhlw3 shfamw3
SigDoseInthbMw3 = no
sxlifeMedFw3 = age illw3 radhlw3 bf4 bf4m
sxlifeMedMw3 = age illw3
sxlifeModFw3 = none
MainEffsxlifeFw3 = age radhlw3 bf4 bf4m shrelaw3 shfamw3
SigDoseSxlifeFw3 = no
sxlifeModMw3 = none
SigDosesxlifeMw3 = no
MainEffsxlifeMw3 = age bf4 illw3 radhlw3
PrbfmhmMedFw3 = age bf4
PrbfmhmMedMw3 = age
PrbfmhmModFw3 = none
MainEffPrbfmhmFw3 = age bf4 bf40
SigDosePrbfmhmFw3 = no
PrbfmhmModw3 = none
SigDosePrbfmhmMw3 = no
SigDosePrbfhmMw3 = no
```

```
MainEffPrbfhmMw3 = bf1 bf4 dvcew3 bf7m
ProbsocMedFw3 = age radhlw3
ProbsocMedMw3 = age
ProbsocModFw3 = none
MainEffProbSocFw3 = age radhlw3 illw3 Shrelaw3 avgcumodsew3
SigDoseProbsocFw3 = yes
ProbSocModMw3 = none
SigDoseProbsocMw3 = no
MainEffPrbsocMw3 = age radhlw3 shjobw3
hmcareMedFw3 = age illw3
hmcareMedMw3 = age illw3
hmcareModFw3 = none
SigdoseHmcareFw3 = no
hmcareModMw3 = none
MainEffhmcareMw3 = none
SigDoseHmcareMw3 = no
  wkMedMw3 = bf8 age illw3 ageXillw3
  wkModFw3 = none
  wkModMw3 = none
MainEffwkFw3 = age
MainEffwkMw3 = workM: age  bf8  illw3  shjobw3
SigDoseWKMw3 = no
SigDoseWkFw3 = no

.
.
.
. *----------- Chunk 5   Dose => Problems with the Family at home Impact
. title "4. H1 pt 2 wave 2  Dose = Fam Problems at home impact"


*******************************************************************************
> *
*******************************************************************************
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****       4. H1 pt 2 wave 2  Dose = Fam Problems at home impact         ****
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****                                         17 Jun 2012    10:07:52     ****
> *
*******************************************************************************
> *
```

```
******************************************************************************
> *



755 . forvalues j = 2/2 {
  2. set more off
  3.
756 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
>   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
  4.
757 .   foreach var in  HP2pbfhm  {
  5.       forvalues k=1/2 {
  6. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  7.
758 . di as input "Full main model for `var' for wave= `j' "
  8. di _skip(4)
  9. di as input  "chunk 5 H1 test:Gender= `k'  model Wave =  `j' for `e(depva
> r)' "
 10. di _skip(4)
 11.
759 .       xi: logistic `var' age i.educ occ1w`j'-occ8w`j' ///
>                 marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
> //
>                 radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
>                  deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
>                 illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
> chrw`j' ///
>                  havmilsq if gender==`k', coef  difficult iterate(50)
 12.                          estat class
 13.                          estat gof
 14.                          fitstat
 15. }
 16. }
 17. }

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
age             double %8.0g                * Respondent's age
educ1           byte   %8.0g                  educ==1. did not graduate high
                                                school
educ2           byte   %8.0g                  educ==2. graduated high school
educ3           byte   %8.0g                  educ==3. technical degree
educ4           byte   %8.0g                  educ==4. did not finish
                                                college/bachelor's
educ5           byte   %8.0g                  educ==5. graduated
                                                college/bachelor's
educ6           byte   %8.0g                  educ==6. finished
```

```
                                                  specialist/master's degree
educ7           byte   %8.0g                    educ==7. doctor of science/phd
marrw21         byte   %8.0g                    marrw2==1. single
marrw22         byte   %8.0g                    marrw2==2. cohabitating
marrw23         byte   %8.0g                    marrw2==3. married
marrw24         byte   %8.0g                    marrw2==4. separated
marrw25         byte   %8.0g                    marrw2==5. divorced
marrw26         byte   %8.0g                    marrw2==6. widowed
inc1w2          double %15.0g      LABJ         Income is not sufficient for
                                                  basic neccessities in 1996
inc2w2          double %15.0g      LABJ         Income is just sufficient for
                                                  basic neccessities in 1996
inc3w2          double %15.0g      LABJ         Income is sufficient for basics
                                                  plus extra purchases/savings
                                                  in 1996
inc4w2          double %15.0g      LABJ         Income allows to comfortably
                                                  afford luxury items in 1996
bf1             float  %9.0g                    bf1 = max(0, kzchorn - 40)
bf4             float  %9.0g                    bf4 = max(0, 24 - BSIsoma)
bf9             float  %9.0g                    bf9= max(0, 30 - shhlw1)
bf11            float  %9.0g                    bf11= max(0, 20 - sufamw1)
bf4m            float  %9.0g                    bf4m = max(0, 32 - BSIsoma)
bf15m           float  %9.0g                    bf15m= max(0, 1 - icdxcnt) * bf2
bf30            float  %9.0g                    bf30 = max(0, neiw1 - 85) * bf20
bf40            float  %9.0g                    bf40 = max(0, icdxcnt -
                                                  1.01635E-007)
Full main model for HP2pbfhm for wave= 2

chunk 5 H1 test:Gender= 1  model Wave =  2 for HP2probsoc

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_2 != 0 predicts failure perfectly
      _Ieduc_2 dropped and 10 obs not used

note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ5w2 != 0 predicts failure perfectly
      occ5w2 dropped and 17 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used
```

```
note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used

note: inc1w2 != 0 predicts failure perfectly
      inc1w2 dropped and 13 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 2 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity

Logistic regression                               Number of obs   =        201
                                                  LR chi2(32)     =      57.01
                                                  Prob > chi2     =     0.0042
Log likelihood = -38.789787                       Pseudo R2       =     0.4236
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0838902	.0451044	1.86	0.063	-.0045127	.1722932
_Ieduc_2	0	(omitted)				
_Ieduc_3	-1.068513	.9797271	-1.09	0.275	-2.988743	.851717
_Ieduc_4	0	(omitted)				
_Ieduc_5	-.7464993	1.30613	-0.57	0.568	-3.306468	1.813469
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	1.365472	9.739165	0.14	0.888	-17.72294	20.45389
occ2w2	.1388058	9.737518	0.01	0.989	-18.94638	19.22399
occ3w2	1.99317	9.743118	0.20	0.838	-17.10299	21.08933
occ4w2	2.351827	9.813506	0.24	0.811	-16.88229	21.58595
occ5w2	0	(omitted)				
occ6w2	0	(omitted)				

occ7w2	.8526169	9.853293	0.09	0.931	-18.45948	20.16472
occ8w2	0	(omitted)				
marrw21	9.450183	1628.316	0.01	0.995	-3181.99	3200.891
marrw22	0	(omitted)				
marrw23	8.041239	1628.316	0.00	0.996	-3183.4	3199.482
marrw25	0	(omitted)				
marrw26	0	(omitted)				
inc1w2	0	(omitted)				
inc2w2	-.2472615	9.778068	-0.03	0.980	-19.41192	18.9174
inc3w2	.4803685	9.779356	0.05	0.961	-18.68682	19.64755
inc4w2	0	(omitted)				
radhlw2	.0219991	.0174949	1.26	0.209	-.0122902	.0562884
havmil	-.0118024	.0110278	-1.07	0.285	-.0334164	.0098117
avgcumdosew2	-.108206	.7718766	-0.14	0.889	-1.621056	1.404644
bf1	-.0239769	.0247822	-0.97	0.333	-.0725492	.0245953
bf4	-.1619124	.088191	-1.84	0.066	-.3347635	.0109388
bf6	.0726065	.0265235	2.74	0.006	.0206214	.1245916
bf7	.5947613	.2273662	2.62	0.009	.1491317	1.040391
bf14	-.0000762	.0001284	-0.59	0.553	-.0003279	.0001756
bf15	0	(omitted)				
bf40	.1113503	.2734738	0.41	0.684	-.4246485	.6473491
deaw2	.5485131	.536457	1.02	0.307	-.5029234	1.59995
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	.185387	1.066161	0.17	0.862	-1.904251	2.275025
movew2	-.6539417	1.506102	-0.43	0.664	-3.605848	2.297965
illw2	1.606215	.6542566	2.46	0.014	.3238954	2.888534
shfamw2	-.0092438	.0132973	-0.70	0.487	-.0353061	.0168184
shhlw2	-.031707	.0186076	-1.70	0.088	-.0681771	.0047632
shjobw2	.0258976	.0158492	1.63	0.102	-.0051662	.0569614
shrelaw2	-.0153159	.0142321	-1.08	0.282	-.0432103	.0125785
suprtw2	-.0315277	.0143652	-2.19	0.028	-.059683	-.0033724
suchrw2	.0165746	.0112144	1.48	0.139	-.0054051	.0385544
havmilsq	.0000128	.0000121	1.06	0.291	-.000011	.0000367
_cons	-18.46331	1628.32	-0.01	0.991	-3209.912	3172.985

Logistic model for HP2pbfhm

	True		
Classified	D	~D	Total
+	6	2	8
-	15	178	193
Total	21	180	201

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   28.57%
Specificity                     Pr( -|~D)   98.89%
Positive predictive value       Pr( D| +)   75.00%
Negative predictive value       Pr(~D| -)   92.23%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    1.11%
False - rate for true D         Pr( -| D)   71.43%
False + rate for classified +   Pr(~D| +)   25.00%
False - rate for classified -   Pr( D| -)    7.77%
--------------------------------------------------
Correctly classified                        91.54%
--------------------------------------------------
```

Logistic model for HP2pbfhm, goodness-of-fit test

```
       number of observations =       201
 number of covariate patterns =       201
            Pearson chi2(168) =        94.58
                  Prob > chi2 =         1.0000

Measures of Fit for logistic of HP2pbfhm

Log-Lik Intercept Only:      -67.297   Log-Lik Full Model:           -38.790
D(152):                       77.580   LR(32):                        57.015
                                       Prob > LR:                      0.004
McFadden's R2:                 0.424   McFadden's Adj R2:             -0.305
Maximum Likelihood R2:         0.247   Cragg & Uhler's R2:             0.506
McKelvey and Zavoina's R2:     0.804   Efron's R2:                     0.348
Variance of y*:               16.822   Variance of error:              3.290
Count R2:                      0.915   Adj Count R2:                   0.190
AIC:                           0.874   AIC*n:                        175.580
BIC:                        -728.523   BIC':                         112.691
Full main model for HP2pbfhm for wave= 2

chunk 5 H1 test:Gender= 2  model Wave =  2 for HP2pbfhm

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 9 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 8 obs not used
```

```
note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 6 obs not used

note: movew2 != 0 predicts failure perfectly
      movew2 dropped and 39 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
convergence not achieved

Logistic regression                               Number of obs   =        291
                                                  LR chi2(39)     =     121.44
                                                  Prob > chi2     =     0.0000
Log likelihood = -67.950854                       Pseudo R2       =     0.4719
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0675647	.0282471	2.39	0.017	.0122015	.1229279
_Ieduc_2	22.46198	4.286253	5.24	0.000	14.06108	30.86288
_Ieduc_3	22.06025	4.212008	5.24	0.000	13.80487	30.31564
_Ieduc_4	22.4092	4.348301	5.15	0.000	13.88669	30.93171
_Ieduc_5	22.32965	4.28528	5.21	0.000	13.93065	30.72864
_Ieduc_6	22.02862	4.22306	5.22	0.000	13.75158	30.30567
_Ieduc_7	21.12883	.	.	.	.	.
_Ieduc_8	0	(omitted)				
occ1w2	.9568844	2.829891	0.34	0.735	-4.5896	6.503369
occ2w2	-2.026671	3.019495	-0.67	0.502	-7.944772	3.891431
occ3w2	1.405631	2.856151	0.49	0.623	-4.192322	7.003584
occ4w2	-1.270684	3.036271	-0.42	0.676	-7.221665	4.680297
occ5w2	2.733135	3.099019	0.88	0.378	-3.340831	8.8071
occ6w2	0	(omitted)				
occ7w2	2.390639	2.797142	0.85	0.393	-3.091658	7.872935
occ8w2	1.799797	3.171082	0.57	0.570	-4.415409	8.015004
marrw21	1.863442	1.565893	1.19	0.234	-1.205651	4.932536
marrw22	0	(omitted)				
marrw23	1.299753	1.073276	1.21	0.226	-.8038291	3.403334
marrw25	1.783742	1.600693	1.11	0.265	-1.353558	4.921042
marrw26	0	(omitted)				
inc1w2	-1.338762	2.877886	-0.47	0.642	-6.979314	4.301791
inc2w2	.7251666	2.789285	0.26	0.795	-4.741732	6.192065
inc3w2	.4037645	2.828422	0.14	0.886	-5.13984	5.947369
inc4w2	0	(omitted)				
radhlw2	.0119256	.0102886	1.16	0.246	-.0082396	.0320909
havmil	-.0040139	.0172972	-0.23	0.816	-.0379157	.0298879

avgcumdosew2	.2722171	.2230232	1.22	0.222	-.1649004	.7093346
bf1	-.0267246	.0134298	-1.99	0.047	-.0530465	-.0004027
bf4	-.3567161	.0758997	-4.70	0.000	-.5054767	-.2079554
bf6	.0040524	.0115093	0.35	0.725	-.0185053	.0266102
bf7	-.087478	.1503624	-0.58	0.561	-.382183	.2072269
bf14	-.0003779	.0001483	-2.55	0.011	-.0006686	-.0000872
bf15	0	(omitted)				
bf40	-.3388161	.1424322	-2.38	0.017	-.6179782	-.0596541
deaw2	-.0547509	.2551957	-0.21	0.830	-.5549253	.4454235
dvcew2	-1.224029	2.015285	-0.61	0.544	-5.173916	2.725858
sepaw2	0	(omitted)				
accdw2	-2.829263	1.402671	-2.02	0.044	-5.578447	-.0800779
movew2	0	(omitted)				
illw2	.0637667	.2827466	0.23	0.822	-.4904064	.6179399
shfamw2	.0166332	.00908	1.83	0.067	-.0011633	.0344296
shhlw2	.0127805	.0100076	1.28	0.202	-.006834	.0323949
shjobw2	-.0073866	.0092188	-0.80	0.423	-.0254551	.0106818
shrelaw2	-.0222876	.0112977	-1.97	0.049	-.0444307	-.0001445
suprtw2	-.0213951	.0081927	-2.61	0.009	-.0374524	-.0053378
suchrw2	-.0010257	.0080813	-0.13	0.899	-.0168647	.0148133
havmilsq	-6.28e-06	.0000546	-0.12	0.908	-.0001132	.0001006
_cons	-23.95744	5.116815	-4.68	0.000	-33.98621	-13.92866

Note: 2 failures and 0 successes completely determined.
Warning: convergence not achieved

Logistic model for HP2pbfhm

	True		
Classified	D	~D	Total
+	27	8	35
-	20	236	256
Total	47	244	291

Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0

Sensitivity	Pr(+| D)	57.45%
Specificity	Pr(-|~D)	96.72%
Positive predictive value	Pr(D| +)	77.14%
Negative predictive value	Pr(~D| -)	92.19%
False + rate for true ~D	Pr(+|~D)	3.28%
False - rate for true D	Pr(-| D)	42.55%
False + rate for classified +	Pr(~D| +)	22.86%
False - rate for classified -	Pr(D| -)	7.81%

```
Correctly classified                              90.38%
--------------------------------------------------------

Logistic model for HP2pbfhm, goodness-of-fit test
-------------------------------------------------

       number of observations =       291
 number of covariate patterns =       291
            Pearson chi2(250) =       231.07
                  Prob > chi2 =         0.7993

Measures of Fit for logistic of HP2pbfhm

Log-Lik Intercept Only:     -128.671     Log-Lik Full Model:           -67.951
D(242):                      135.902     LR(39):                       121.440
                                         Prob > LR:                      0.000
McFadden's R2:                 0.472     McFadden's Adj R2:              0.091
Maximum Likelihood R2:         0.341     Cragg & Uhler's R2:             0.581
McKelvey and Zavoina's R2:     0.819     Efron's R2:                     0.487
Variance of y*:               18.199     Variance of error:              3.290
Count R2:                      0.904     Adj Count R2:                   0.404
AIC:                           0.804     AIC*n:                        233.902
BIC:                       -1237.043     BIC':                          99.819

760 .
761 .
762 . title4 "Partly Trimmed male Wave 2  Dose => Problems with Family at home mod
> els"
------------------------------------------------------------------------------
Partly Trimmed male Wave 2  Dose => Problems with Family at home models
------------------------------------------------------------------------------

763 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

764 . logit HP2pbfhm age bf6 bf7  radhlw2 avgcumdosew2 shhlw2 shjobw2 suprtw2 ///
>    havmilsq illw2 if gender==1, iterate(50)

Iteration 0:   log likelihood = -81.506236
Iteration 1:   log likelihood = -70.711736
Iteration 2:   log likelihood = -65.560557
Iteration 3:   log likelihood = -65.354395
Iteration 4:   log likelihood = -65.353064
Iteration 5:   log likelihood = -65.353062

Logistic regression                               Number of obs   =        340
                                                  LR chi2(10)     =      32.31
                                                  Prob > chi2     =     0.0004
Log likelihood = -65.353062                       Pseudo R2       =     0.1982
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0370609	.0212772	1.74	0.082	-.0046417	.0787635
bf6	.0345573	.0133394	2.59	0.010	.0084125	.0607022
bf7	.2745069	.1197775	2.29	0.022	.0397473	.5092666
radhlw2	.0100781	.0082635	1.22	0.223	-.006118	.0262742
avgcumdosew2	-.1562252	.2515535	-0.62	0.535	-.649261	.3368105
shhlw2	-.0068707	.0086681	-0.79	0.428	-.0238598	.0101185
shjobw2	.0042909	.0081914	0.52	0.600	-.0117638	.0203457
suprtw2	-.0056613	.0058911	-0.96	0.337	-.0172077	.0058851
havmilsq	-1.23e-06	7.81e-06	-0.16	0.874	-.0000165	.0000141
illw2	.7484301	.3313945	2.26	0.024	.0989088	1.397951
_cons	-7.299944	1.469743	-4.97	0.000	-10.18059	-4.4193

```
.
. estat class
```

Logistic model for HP2pbfhm

Classified	True D	True ~D	Total
+	0	1	1
-	22	317	339
Total	22	318	340

Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0

Sensitivity	Pr(+| D)	0.00%
Specificity	Pr(-|~D)	99.69%
Positive predictive value	Pr(D| +)	0.00%
Negative predictive value	Pr(~D| -)	93.51%
False + rate for true ~D	Pr(+|~D)	0.31%
False - rate for true D	Pr(-| D)	100.00%
False + rate for classified +	Pr(~D| +)	100.00%
False - rate for classified -	Pr(D| -)	6.49%
Correctly classified		93.24%

```
767 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    _________________________________________________

           number of observations =       340
     number of covariate patterns =       338
                 Pearson chi2(327) =       250.44
                       Prob > chi2 =         0.9994

768 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:      -81.506     Log-Lik Full Model:           -65.353
    D(329):                      130.706     LR(10):                        32.306
                                             Prob > LR:                      0.000
    McFadden's R2:                 0.198     McFadden's Adj R2:              0.063
    Maximum Likelihood R2:         0.091     Cragg & Uhler's R2:             0.238
    McKelvey and Zavoina's R2:     0.404     Efron's R2:                     0.093
    Variance of y*:                5.524     Variance of error:              3.290
    Count R2:                      0.932     Adj Count R2:                  -0.045
    AIC:                           0.449     AIC*n:                        152.706
    BIC:                       -1787.017     BIC':                          25.983

769 .
770 . title4 "trimmed male main effects wv 2" " Dose => Problems with Family at ho
    > me models"
    ____________________________________________________________________________

    trimmed male main effects wv 2
    ____________________________________________________________________________

771 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

772 . sw, pr(.1):logit HP2pbfhm age sepaw2 dvcew2 radhlw2 avgcumdosew2 bf4 bf6 bf7
    >  suprtw2 ///
    >    havmilsq illw2 if gender==1, iterate(50)
    note: sepaw2 dropped because of estimability
    note: dvcew2 dropped because of estimability
    note: o.sepaw2 dropped because of estimability
    note: o.dvcew2 dropped because of estimability
    note: 10 obs. dropped because of estimability
                          begin with full model
    p = 0.8936 >= 0.1000  removing havmilsq
    p = 0.7469 >= 0.1000  removing avgcumdosew2
    p = 0.6617 >= 0.1000  removing radhlw2
    p = 0.3316 >= 0.1000  removing suprtw2
    p = 0.2216 >= 0.1000  removing age
```

```
Logistic regression                             Number of obs     =        330
                                                LR chi2(4)        =      30.41
                                                Prob > chi2       =     0.0000
Log likelihood =  -65.61942                     Pseudo R2         =     0.1881

------------------------------------------------------------------------------
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf6 |   .0392413     .01226     3.20   0.001     .0152122    .0632704
         bf7 |   .2697216   .1148207     2.35   0.019     .0446772     .494766
       illw2 |   .5624726    .330378     1.70   0.089    -.0850564    1.210002
         bf4 |  -.1039323   .0416421    -2.50   0.013    -.1855494   -.0223153
       _cons |  -4.327314    1.14845    -3.77   0.000    -6.578234   -2.076394
------------------------------------------------------------------------------

773 .
774 . estat class

Logistic model for HP2pbfhm

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |         0             0  |          0
     -     |        22           308  |        330
-----------+--------------------------+-----------
   Total   |        22           308  |        330

Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)    0.00%
Specificity                     Pr( -|~D)  100.00%
Positive predictive value       Pr( D| +)       .%
Negative predictive value       Pr(~D| -)   93.33%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    0.00%
False - rate for true D         Pr( -| D)  100.00%
False + rate for classified +   Pr(~D| +)       .%
False - rate for classified -   Pr( D| -)    6.67%
--------------------------------------------------
Correctly classified                        93.33%
--------------------------------------------------
```

```
775 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    -------------------------------------------------

           number of observations =       330
     number of covariate patterns =       157
                Pearson chi2(152) =       131.86
                      Prob > chi2 =         0.8794

776 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:      -80.827    Log-Lik Full Model:           -65.619
    D(325):                      131.239    LR(4):                         30.415
                                            Prob > LR:                      0.000
    McFadden's R2:                 0.188    McFadden's Adj R2:              0.126
    Maximum Likelihood R2:         0.088    Cragg & Uhler's R2:             0.227
    McKelvey and Zavoina's R2:     0.353    Efron's R2:                     0.106
    Variance of y*:                5.085    Variance of error:              3.290
    Count R2:                      0.933    Adj Count R2:                   0.000
    AIC:                           0.428    AIC*n:                        141.239
    BIC:                       -1753.466    BIC':                          -7.219

777 .
778 . scalar MainEffPrbfhmMw2 = "bf4 bf6 bf7"

779 . scalar SigDosePrbfhmMw2 = "no"

780 . // construction of moderators for male model
781 .
782 . foreach var in bf4 bf6 bf7 {
      2.  cap gen `var'Xd2 = `var'*avgcumdosew2
      3.   }

783 .
```

```
784 .
785 .
786 .
787 . ****************************************************************************
    > **
788 . *-------chunk 6  continued -testing moderators and none found for males
789 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

790 .
791 .
792 . title4 "fully Trimmed male main effects wv 3" ///
    >   "Dose => Problems with Family at home models"
    ------------------------------------------------------------------------------
    fully Trimmed male main effects wv 3
    ------------------------------------------------------------------------------

793 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

794 . logit HP2pbfhm age radhlw2 avgcumdosew2  ///
    >   bf6Xd2  bf7Xd2 if ///
    >     gender==1, iterate(50)

    Iteration 0:   log likelihood = -81.506236
    Iteration 1:   log likelihood = -73.447506
    Iteration 2:   log likelihood = -70.882142
    Iteration 3:   log likelihood = -69.255694
    Iteration 4:   log likelihood = -68.922279
    Iteration 5:   log likelihood = -68.919492
    Iteration 6:   log likelihood = -68.919491

    Logistic regression                               Number of obs   =        340
                                                      LR chi2(5)      =      25.17
                                                      Prob > chi2     =     0.0001
    Log likelihood = -68.919491                       Pseudo R2       =     0.1544

    ------------------------------------------------------------------------------
        HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             age |   .0386912   .0199545     1.94   0.053    -.0004189    .0778014
         radhlw2 |   .0143508   .0076003     1.89   0.059    -.0005455    .0292471
    avgcumdosew2 |  -3.388044   1.802017    -1.88   0.060    -6.919932    .1438441
          bf6Xd2 |   .0367575   .0198745     1.85   0.064    -.0021958    .0757109
          bf7Xd2 |   .3054727   .1764719     1.73   0.083    -.0404059    .6513514
           _cons |   -5.00095   1.200256    -4.17   0.000    -7.353408   -2.648492
    ------------------------------------------------------------------------------
    Note: 3 failures and 0 successes completely determined.
```

```
795 .
796 . estat class

    Logistic model for HP2pbfhm

                  -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |         0             0  |          0
         -     |        22           318  |        340
    -----------+--------------------------+-----------
       Total   |        22           318  |        340

    Classified + if predicted Pr(D) >= .5
    True D defined as HP2pbfhm != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)    0.00%
    Specificity                     Pr( -|~D)  100.00%
    Positive predictive value       Pr( D| +)       .%
    Negative predictive value       Pr(~D| -)   93.53%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)    0.00%
    False - rate for true D         Pr( -| D)  100.00%
    False + rate for classified +   Pr(~D| +)       .%
    False - rate for classified -   Pr( D| -)    6.47%
    --------------------------------------------------
    Correctly classified                        93.53%
    --------------------------------------------------

797 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    -------------------------------------------------

           number of observations =       340
     number of covariate patterns =       329
                Pearson chi2(323) =       290.81
                      Prob > chi2 =         0.9005
```

```
798 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:      -81.506     Log-Lik Full Model:          -68.919
    D(334):                      137.839     LR(5):                        25.173
                                             Prob > LR:                     0.000
    McFadden's R2:                 0.154     McFadden's Adj R2:             0.081
    Maximum Likelihood R2:         0.071     Cragg & Uhler's R2:            0.187
    McKelvey and Zavoina's R2:     0.903     Efron's R2:                    0.079
    Variance of y*:               33.925     Variance of error:             3.290
    Count R2:                      0.935     Adj Count R2:                  0.000
    AIC:                           0.441     AIC*n:                       149.839
    BIC:                       -1809.029     BIC':                          3.971

799 .
800 . scalar SigDosePrbfmhmMw2 = "no"

801 . scalar PrbfmhmModMw2 = "none"

802 . scalar MainEffPrbfmhmMw2= "bf4 bf6 bf7"

803 . * 3 main effects signif   no main effect for dose  for males
804 .
805 .
806 . *-------Chunk 6  continued -testing meditors for females
807 . title4 "Partly Trimmed female Wave 2"  "Dose => Problems with Family at home
    >  models"
    ------------------------------------------------------------------------------
    Partly Trimmed female Wave 2
    ------------------------------------------------------------------------------

808 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40

809 . logit HP2pbfhm age  radhlw2 avgcumdosew2 bf4  if gender==2, iterate(50)

    Iteration 0:   log likelihood = -139.89675
    Iteration 1:   log likelihood =  -113.0036
    Iteration 2:   log likelihood = -107.10312
    Iteration 3:   log likelihood = -106.98442
    Iteration 4:   log likelihood = -106.98403
    Iteration 5:   log likelihood = -106.98403

    Logistic regression                               Number of obs   =        363
                                                      LR chi2(4)      =      65.83
                                                      Prob > chi2     =     0.0000
    Log likelihood = -106.98403                       Pseudo R2       =     0.2353
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0557545	.0170818	3.26	0.001	.0222747	.0892342
radhlw2	.0108772	.0060404	1.80	0.072	-.0009617	.0227161
avgcumdosew2	-.0049664	.0969934	-0.05	0.959	-.19507	.1851373
bf4	-.1657135	.0368332	-4.50	0.000	-.2379053	-.0935217
_cons	-4.323335	1.125843	-3.84	0.000	-6.529946	-2.116724

```
810 .
811 . estat class
```

Logistic model for HP2pbfhm

Classified	True D	True ~D	Total
+	9	6	15
-	38	310	348
Total	47	316	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0

Sensitivity	Pr(+| D)	19.15%
Specificity	Pr(-|~D)	98.10%
Positive predictive value	Pr(D| +)	60.00%
Negative predictive value	Pr(~D| -)	89.08%
False + rate for true ~D	Pr(+|~D)	1.90%
False - rate for true D	Pr(-| D)	80.85%
False + rate for classified +	Pr(~D| +)	40.00%
False - rate for classified -	Pr(D| -)	10.92%
Correctly classified		87.88%

```
812 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    -------------------------------------------------

           number of observations =       363
     number of covariate patterns =       361
                Pearson chi2(356) =       363.32
                      Prob > chi2 =         0.3830

813 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:     -139.897    Log-Lik Full Model:          -106.984
    D(358):                      213.968    LR(4):                         65.825
                                            Prob > LR:                      0.000
    McFadden's R2:                 0.235    McFadden's Adj R2:              0.200
    Maximum Likelihood R2:         0.166    Cragg & Uhler's R2:             0.309
    McKelvey and Zavoina's R2:     0.390    Efron's R2:                     0.216
    Variance of y*:                5.395    Variance of error:              3.290
    Count R2:                      0.879    Adj Count R2:                   0.064
    AIC:                           0.617    AIC*n:                        223.968
    BIC:                       -1896.228    BIC':                         -42.248

814 .
815 . scalar SigDosePrbfmhmFw2="no"

816 .
817 . *-------Chunk 6  continued -testing meditors for females
818 . title4 "More partly female Trimmed Wave 2"  "Dose => Problems with Family at
    >  home models"
    ------------------------------------------------------------------------------
    More partly female Trimmed Wave 2
    ------------------------------------------------------------------------------

819 . local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
```

```
820 . logit HP2pbfhm age  bf4 bf40  if gender==2, iterate(50)

Iteration 0:   log likelihood = -139.89675
Iteration 1:   log likelihood = -112.36921
Iteration 2:   log likelihood = -106.24923
Iteration 3:   log likelihood = -106.12137
Iteration 4:   log likelihood = -106.12091
Iteration 5:   log likelihood = -106.12091

Logistic regression                               Number of obs   =        363
                                                  LR chi2(3)      =      67.55
                                                  Prob > chi2     =     0.0000
Log likelihood = -106.12091                       Pseudo R2       =     0.2414
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0636233	.017269	3.68	0.000	.0297767	.0974699
bf4	-.2029758	.0392585	-5.17	0.000	-.2799211	-.1260305
bf40	-.1942568	.091411	-2.13	0.034	-.373419	-.0150946
_cons	-3.085643	1.113267	-2.77	0.006	-5.267607	-.9036792

```
821 .
822 . estat class

Logistic model for HP2pbfhm
```

Classified	True D	True ~D	Total
+	12	3	15
-	35	313	348
Total	47	316	363

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2pbfhm != 0
```

Sensitivity	Pr(+| D)	25.53%
Specificity	Pr(-|~D)	99.05%
Positive predictive value	Pr(D| +)	80.00%
Negative predictive value	Pr(~D| -)	89.94%
False + rate for true ~D	Pr(+|~D)	0.95%
False - rate for true D	Pr(-| D)	74.47%
False + rate for classified +	Pr(~D| +)	20.00%
False - rate for classified -	Pr(D| -)	10.06%

```
    Correctly classified                        89.53%
    --------------------------------------------------

823 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    -------------------------------------------------

           number of observations =       363
     number of covariate patterns =       341
                Pearson chi2(337) =       366.00
                      Prob > chi2 =         0.1331

824 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:     -139.897    Log-Lik Full Model:          -106.121
    D(359):                      212.242    LR(3):                         67.552
                                            Prob > LR:                      0.000
    McFadden's R2:                 0.241    McFadden's Adj R2:              0.213
    Maximum Likelihood R2:         0.170    Cragg & Uhler's R2:             0.316
    McKelvey and Zavoina's R2:     0.399    Efron's R2:                     0.224
    Variance of y*:                5.470    Variance of error:              3.290
    Count R2:                      0.895    Adj Count R2:                   0.191
    AIC:                           0.607    AIC*n:                        220.242
    BIC:                       -1903.849    BIC':                         -49.868

825 .
826 .
827 . scalar MainEffPrbfmhmFw2 = "age bf4 bf40"

828 . * 3 significant main effects for females
829 . * no significant main effect for dose
830 .
831 . * constructing moderators
832 .
```

```
833 . foreach var in bf4 bf40 {
      2. cap  gen `var'Xd2 = `var'*avgcumdosew2
      3.  }

834 .
835 .
836 . title4 "testing female moderator effects:  no moderator effects for females"
```

testing female moderator effects: no moderator effects for females

```
837 .
838 . logit HP2pbfhm age bf4 bf40 ageXd2 bf4Xd2 bf40Xd2 if gender==2, iterate(50)

Iteration 0:   log likelihood = -139.89675
Iteration 1:   log likelihood = -111.91159
Iteration 2:   log likelihood =  -105.8511
Iteration 3:   log likelihood = -104.97326
Iteration 4:   log likelihood = -104.94985
Iteration 5:   log likelihood =  -104.9498
Iteration 6:   log likelihood =  -104.9498

Logistic regression                               Number of obs   =        363
                                                  LR chi2(6)      =      69.89
                                                  Prob > chi2     =     0.0000
Log likelihood =  -104.9498                       Pseudo R2       =     0.2498
```

HP2pbfhm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.057978	.018048	3.21	0.001	.0226046	.0933514
bf4	-.2081538	.0505288	-4.12	0.000	-.3071884	-.1091193
bf40	-.0721876	.1339532	-0.54	0.590	-.334731	.1903558
ageXd2	.006707	.0069963	0.96	0.338	-.0070055	.0204195
bf4Xd2	.0146354	.0371601	0.39	0.694	-.0581971	.087468
bf40Xd2	-.1308031	.1156271	-1.13	0.258	-.357428	.0958218
_cons	-3.176982	1.121456	-2.83	0.005	-5.374996	-.9789674

```
839 . estat gof

    Logistic model for HP2pbfhm, goodness-of-fit test
    -------------------------------------------------

           number of observations =       363
     number of covariate patterns =       359
                Pearson chi2(352) =       361.42
                      Prob > chi2 =         0.3531

840 . estat class

    Logistic model for HP2pbfhm

                  -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |        14             4  |         18
         -     |        33           312  |        345
    -----------+--------------------------+-----------
       Total   |        47           316  |        363

    Classified + if predicted Pr(D) >= .5
    True D defined as HP2pbfhm != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   29.79%
    Specificity                     Pr( -|~D)   98.73%
    Positive predictive value       Pr( D| +)   77.78%
    Negative predictive value       Pr(~D| -)   90.43%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)    1.27%
    False - rate for true D         Pr( -| D)   70.21%
    False + rate for classified +   Pr(~D| +)   22.22%
    False - rate for classified -   Pr( D| -)    9.57%
    --------------------------------------------------
    Correctly classified                        89.81%
    --------------------------------------------------
```

```
841 . fitstat

    Measures of Fit for logit of HP2pbfhm

    Log-Lik Intercept Only:      -139.897     Log-Lik Full Model:          -104.950
    D(356):                       209.900     LR(6):                         69.894
                                              Prob > LR:                      0.000
    McFadden's R2:                  0.250     McFadden's Adj R2:              0.200
    Maximum Likelihood R2:          0.175     Cragg & Uhler's R2:             0.326
    McKelvey and Zavoina's R2:      0.411     Efron's R2:                     0.233
    Variance of y*:                 5.585     Variance of error:              3.290
    Count R2:                       0.898     Adj Count R2:                   0.213
    AIC:                            0.617     AIC*n:                        223.900
    BIC:                        -1888.508     BIC':                         -34.527

842 .
843 . scalar PrbfmhmModFw2="none"

844 .
845 . ************************************************************************
    > ****
846 . *---------Chunk 6 continued testing mediating effects for Problems with fami
    > ly
847 .  *  at home
848 .
849 . * age is a mediating effect for males for Dose=> problems with family at hom
    > e
850 . des bf4 bf40

                  storage  display     value
    variable name   type   format      label      variable label
    -----------------------------------------------------------------------------
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                    1.01635E-007)

851 . glm age avgcumdosew2 if gender==1, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1330.6004

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       338
                                                       Scale parameter =  147.6853
    Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
    Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]
```

```
                                                  AIC             =  7.838826
Log likelihood   =   -1330.6004                   BIC             =  47947.46

------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .5832314   .2635871     2.21   0.027     .0666101    1.099853
       _cons |   48.62133   .7061562    68.85   0.000     47.23729    50.00537
------------------------------------------------------------------------------
```

852 . glm HP2pbfhm age if gender==1, fam(bin) irls scale(dev) link(probit)

```
Iteration 1:   deviance =  163.1004
Iteration 2:   deviance =  152.8997
Iteration 3:   deviance =  151.9532
Iteration 4:   deviance =  151.9347
Iteration 5:   deviance =  151.9347
Iteration 6:   deviance =  151.9347

Generalized linear models                         No. of obs      =        340
Optimization     : MQL Fisher scoring             Residual df     =        338
                   (IRLS EIM)                     Scale parameter =          1
Deviance         =  151.9346518                   (1/df) Deviance =   .4495108
Pearson          =  324.8005072                   (1/df) Pearson  =   .9609482

Variance function: V(u) = u*(1-u)                 [Bernoulli]
Link function    : g(u) = invnorm(u)              [Probit]

                                                  BIC             =  -1818.249

------------------------------------------------------------------------------
             |                 EIM
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0296385   .0061334     4.83   0.000     .0176173    .0416597
       _cons |  -3.073816   .3430721    -8.96   0.000    -3.746225   -2.401407
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)
```

```
853 .
854 . glm bf4  avgcumdosew2 if gender==1, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1027.1225

    Generalized linear models                          No. of obs      =        340
    Optimization     : ML                              Residual df     =        338
                                                       Scale parameter =    24.7771
    Deviance         =  8374.659221                    (1/df) Deviance =    24.7771
    Pearson          =  8374.659221                    (1/df) Pearson  =    24.7771

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   6.053662
    Log likelihood   = -1027.122509                    BIC             =   6404.476

    ------------------------------------------------------------------------------
                 |                 OIM
             bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |  -.0331637   .1079644    -0.31   0.759    -.2447701    .1784427
           _cons |   12.52896   .2892393    43.32   0.000     11.96206    13.09586
    ------------------------------------------------------------------------------

855 . glm HP2pbfhm bf4  if gender==1, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =  160.0024
    Iteration 2:   deviance =  148.9095
    Iteration 3:   deviance =  148.0472
    Iteration 4:   deviance =  148.0358
    Iteration 5:   deviance =  148.0358
    Iteration 6:   deviance =  148.0358

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        338
                        (IRLS EIM)                     Scale parameter =          1
    Deviance         =  148.0358223                    (1/df) Deviance =   .4379758
    Pearson          =  318.8927909                    (1/df) Pearson  =   .9434698

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1822.148
```

```
------------------------------------------------------------------------------
             |                 EIM
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         bf4 |  -.0752171   .0127773    -5.89   0.000    -.1002602   -.0501741
       _cons |  -.6910419   .1483563    -4.66   0.000    -.9818149    -.400269
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

856 .
857 . * age is a mediating effect for females for Dose=> Problems with family at h
    > ome
858 . glm age avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1406.9403

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =  136.9184
Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  7.762756
Log likelihood   = -1406.940271                    BIC             =  47299.65

------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
       _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
------------------------------------------------------------------------------

859 . glm HP2pbfhm age  if gender==2, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  252.4902
Iteration 2:   deviance =  245.4181
Iteration 3:   deviance =  245.1325
Iteration 4:   deviance =  245.1321
Iteration 5:   deviance =  245.1321
```

```
Generalized linear models                          No. of obs      =        363
Optimization     : MQL Fisher scoring              Residual df     =        361
                   (IRLS EIM)                      Scale parameter =          1
Deviance         =  245.1320769                    (1/df) Deviance =   .6790362
Pearson          =  382.7456824                    (1/df) Pearson  =   1.060237

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             =  -1882.747

------------------------------------------------------------------------------
             |                 EIM
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |    .043836   .0066445     6.60   0.000      .030813     .056859
       _cons |  -3.477625   .3761287    -9.25   0.000    -4.214824   -2.740426
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

860 .
861 . * bf4 is a mediting effect for females for Dose=> Problems with family at ho
    > me
862 . glm bf4  avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1109.0983

Generalized linear models                          No. of obs      =        363
Optimization     : ML                              Residual df     =        361
                                                   Scale parameter =   26.53281
Deviance         =  9578.344971                    (1/df) Deviance =   26.53281
Pearson          =  9578.344971                    (1/df) Pearson  =   26.53281

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   6.121754
Log likelihood   = -1109.098281                    BIC             =   7450.466

------------------------------------------------------------------------------
             |                 OIM
         bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   -.595012   .1960703    -3.03   0.002    -.9793027   -.2107212
       _cons |   11.02048   .3223763    34.19   0.000     10.38863    11.65232
------------------------------------------------------------------------------
```

```
863 . glm HP2pbfhm bf4  if gender==2, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =  240.0481
    Iteration 2:   deviance =  229.4916
    Iteration 3:   deviance =  228.6166
    Iteration 4:   deviance =  228.5986
    Iteration 5:   deviance =  228.5985
    Iteration 6:   deviance =  228.5985

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  228.5985175                    (1/df) Deviance =  .6332369
    Pearson          =  299.6186696                    (1/df) Pearson  =  .8299686

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1899.281

    ------------------------------------------------------------------------------
                 |                 EIM
        HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             bf4 |  -.1229375   .0145262    -8.46   0.000    -.1514083   -.0944667
           _cons |  -.0739521   .1322299    -0.56   0.576    -.3331179    .1852138
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

864 .
865 .
866 . glm bf6  avgcumdosew2 if gender==2, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1783.7385

    Generalized linear models                          No. of obs      =       363
    Optimization     : ML                              Residual df     =       361
                                                       Scale parameter =  1091.609
    Deviance         =  394070.7897                    (1/df) Deviance =  1091.609
    Pearson          =  394070.7897                    (1/df) Pearson  =  1091.609

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  9.838779
    Log likelihood   = -1783.738453                    BIC             =  391942.9
```

```
-----------------------------------------------------------------------------
             |                 OIM
         bf6 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
avgcumdosew2 |   1.917643   1.257632     1.52   0.127    -.5472713    4.382557
       _cons |   53.39006   2.067783    25.82   0.000     49.33728    57.44284
-----------------------------------------------------------------------------

867 . glm HP2pbfhm bf6  if gender==2, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =   270.845
    Iteration 2:   deviance =  267.9149
    Iteration 3:   deviance =  267.8425
    Iteration 4:   deviance =  267.8424
    Iteration 5:   deviance =  267.8424

    Generalized linear models                          No. of obs      =       363
    Optimization     : MQL Fisher scoring              Residual df     =       361
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  267.8424366                    (1/df) Deviance =  .7419458
    Pearson          =  362.9777402                    (1/df) Pearson  =  1.005479

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1860.037

-----------------------------------------------------------------------------
             |                 EIM
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
         bf6 |   .0094515   .0024584     3.84   0.000     .0046331    .0142698
       _cons |  -1.703802   .1741973    -9.78   0.000    -2.045223   -1.362382
-----------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

868 .
```

```
869 .
870 . glm bf7  avgcumdosew2 if gender==2, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -902.57713

    Generalized linear models                          No. of obs      =        363
    Optimization     : ML                              Residual df     =        361
                                                       Scale parameter =   8.503897
    Deviance         =  3069.906975                    (1/df) Deviance =   8.503897
    Pearson          =  3069.906975                    (1/df) Pearson  =   8.503897

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =   4.983896
    Log likelihood   = -902.5771339                    BIC             =   942.0276

    ------------------------------------------------------------------------------
                 |                 OIM
             bf7 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    avgcumdosew2 |  -.1298425   .1110016    -1.17   0.242    -.3474016    .0877166
           _cons |   1.052922   .1825074     5.77   0.000      .695214     1.41063
    ------------------------------------------------------------------------------

871 . glm HP2pbfhm bf7  if gender==2, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =  277.1289
    Iteration 2:   deviance =  275.4145
    Iteration 3:   deviance =  275.2733
    Iteration 4:   deviance =  275.2711
    Iteration 5:   deviance =  275.2711

    Generalized linear models                          No. of obs      =        363
    Optimization     : MQL Fisher scoring              Residual df     =        361
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  275.2710641                    (1/df) Deviance =   .7625237
    Pearson          =  362.9709778                    (1/df) Pearson  =    1.00546

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1852.608
```

```
---------------------------------------------------------------------------------
             |                 EIM
    HP2pbfhm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-------------------------------------------------------------------
         bf7 |  -.0808371   .0385299    -2.10   0.036    -.1563543   -.0053198
       _cons |  -1.081139   .0750775   -14.40   0.000    -1.228288   -.9339898
---------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

872 .
873 . scalar PrbfmhmMedMw2 = "age"

874 . scalar PrbfmhmMedFw2 = "age bf4"

875 . * Summary of dose=problems with family at home  mediating effects
876 . * males mediators age 1
877 . * females mediators age and BSIsoma rescaled (bf4) 2
878 .
879 . title4 "4. Summary matrix for problems with family at home"
---------------------------------------------------------------------------------
4. Summary matrix for problems with family at home
---------------------------------------------------------------------------------

880 .    matrix define prbfamMw2 = J(1,8, 0)

881 .         matrix define prbfamFw2 = J(1,8, 0)

882 . matrix colnames prbfamMw2=  hypnum ptnum wave gender medsig numMAsig numMods
    > ig numMed

883 .         matrix colnames prbfamFw2=  hypnum ptnum wave gender medsig numMAsig
    >  numModsig numMed

884 .     matrix define prbfamMw2= (1, 2, 3, 1, 0, 3, 0, 1 )

885 .         matrix define prbfamFw2= (1, 2, 3, 2, 0, 3, 0, 2)
```

```
886 .         matrix rowname prbfamMw2 = prbfamMw2

887 .         matrix rowname prbfamFw2 = prbfamFw2

888 .         matlist prbfamMw2

             |         c1         c2         c3         c4         c5          c
> 6        c7         c8
-------------+------------------------------------------------------------------------------
> ------------------------
   prbfamMw2 |          1          2          3          1          0
> 3         0          1

889 .         matlist prbfamFw2

             |         c1         c2         c3         c4         c5          c
> 6        c7         c8
-------------+------------------------------------------------------------------------------
> ------------------------
   prbfamFw2 |          1          2          3          2          0
> 3         0          2

890 .         matrix define H1pt2w2 = ( wkMw2 \ wkFw2 \ hmcrMw2 \ hmcrFw2 \ spMw2
> \ spFw2 \ prbfamMw2 \ prbfamFw2)

891 .
892 .         matlist H1pt2w2

             |         c1         c2         c3         c4         c5          c
> 6        c7         c8
-------------+------------------------------------------------------------------------------
> ------------------------
          r1 |          1          2          2          1          0
> 2         0          2
          r1 |          1          2          2          2          0
> 1         0          2
          r1 |          1          2          3          1          0
> 1         0          1
          r1 |          1          2          3          2          1
> 1         0          2
       spMw2 |          1          2          3          1          0
> 4         0          1
       spFw2 |          1          2          3          2          1
> 5         0          3
   prbfamMw2 |          1          2          3          1          0
> 3         0          1
   prbfamFw2 |          1          2          3          2          0
> 3         0          2
```

```
893 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
    > odsig numMed

894 .     matrix rownames H1pt2w2 =   wkMw2 wkFw2 hmcrMw2 hmcrFw2 prbsocMw2 prbsoc
    > Fw2 prbfhmMw2 prbfhmFw2

895 .     matlist H1pt2w2

                 |    hypnum      ptnum       wave     gender     medsig   numMAsi
    > g  numModsig     numMed
    -------------+------------------------------------------------------------------
    > --------------------------
           wkMw2 |         1          2          2          1          0
    > 2          0          2
           wkFw2 |         1          2          2          2          0
    > 1          0          2
         hmcrMw2 |         1          2          3          1          0
    > 1          0          1
         hmcrFw2 |         1          2          3          2          1
    > 1          0          2
       prbsocMw2 |         1          2          3          1          0
    > 4          0          1
       prbsocFw2 |         1          2          3          2          1
    > 5          0          3
       prbfhmMw2 |         1          2          3          1          0
    > 3          0          1
       prbfhmFw2 |         1          2          3          2          0
    > 3          0          2

896 .
897 .
898 .
899 . ***************************************************************************
    > ****
900 . *-------Chunk 7   Dose==> problems with sex life impact
901 . * Chunk 7  General model for all part 2 of Nottingham Health Profile
902 .
```

```
903 . title "5.  H1 pt 2 Wave 2 part2 H1 dose sex life impact"


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****          5.  H1 pt 2 Wave 2 part2 H1 dose sex life impact          ****
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****                                17 Jun 2012    10:08:29  ****
    > *
    ******************************************************************************
    > *
    ******************************************************************************
    > *


904 .
905 . forvalues j = 2/2 {
      2. set more off
      3.
906 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
    >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
      4.
907 .   foreach var in HP2sxlife  {
      5.       forvalues k=1/2 {
      6. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
      7. title "Full Nottingham Part 2 subscale models for male & females" ///
    >  "Full main model for `var' for wave= `j' " ///
    >   "chunk 7 H1 test:Gender= `k'  model Wave =  `j' for `e(depvar)' "
      8. di _skip(4)
      9.
```

```
908 . di _skip(4)
     10.
909 .
910 .       xi: logistic `var' age i.educ occ1w`j'-occ8w`j' ///
    >               marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
    > //
    >               radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
    >                deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
    >               illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
    > chrw`j' ///
    >                havmilsq radhlw2 if gender==`k', coef  difficult iterate(50
    > )
     11.                         estat class
     12.                         estat gof
     13.                         fitstat
     14. }
     15. }
     16. }

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------

    age             double %8.0g                * Respondent's age
    educ1           byte   %8.0g                  educ==1. did not graduate high
                                                    school
    educ2           byte   %8.0g                  educ==2. graduated high school
    educ3           byte   %8.0g                  educ==3. technical degree
    educ4           byte   %8.0g                  educ==4. did not finish
                                                    college/bachelor's
    educ5           byte   %8.0g                  educ==5. graduated
                                                    college/bachelor's
    educ6           byte   %8.0g                  educ==6. finished
                                                    specialist/master's degree
    educ7           byte   %8.0g                  educ==7. doctor of science/phd
    marrw21         byte   %8.0g                  marrw2==1. single
    marrw22         byte   %8.0g                  marrw2==2. cohabitating
    marrw23         byte   %8.0g                  marrw2==3. married
    marrw24         byte   %8.0g                  marrw2==4. separated
    marrw25         byte   %8.0g                  marrw2==5. divorced
    marrw26         byte   %8.0g                  marrw2==6. widowed
    inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                    basic neccessities in 1996
    inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                    basic neccessities in 1996
    inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                    plus extra purchases/savings
                                                    in 1996
    inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                    afford luxury items in 1996
```

```
bf1              float  %9.0g                bf1 = max(0, kzchorn - 40)
bf4              float  %9.0g                bf4 = max(0, 24 - BSIsoma)
bf9              float  %9.0g                bf9= max(0, 30 - shhlw1)
bf11             float  %9.0g                bf11= max(0, 20 - sufamw1)
bf4m             float  %9.0g                bf4m = max(0, 32 - BSIsoma)
bf15m            float  %9.0g                bf15m= max(0, 1 - icdxcnt) * bf2
bf30             float  %9.0g                bf30 = max(0, neiw1 - 85) * bf20
bf40             float  %9.0g                bf40 = max(0, icdxcnt -
                                               1.01635E-007)


****************************************************************************
> *
****************************************************************************
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****     Full Nottingham Part 2 subscale models for male & females     ****
> *
*****             Full main model for HP2sxlife for wave= 2             ****
> *
*****      chunk 7 H1 test:Gender= 1  model Wave =  2 for HP2pbfhm      ****
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****                                        17 Jun 2012    10:08:29    ****
> *
****************************************************************************
> *
****************************************************************************
> *



i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used
```

```
note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 8 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_8 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity

Logistic regression                               Number of obs   =        248
                                                  LR chi2(38)     =     124.45
                                                  Prob > chi2     =     0.0000
Log likelihood = -81.459667                       Pseudo R2       =     0.4331
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.045416	.0245513	1.85	0.064	-.0027037	.0935357
_Ieduc_2	-.0646877	2.529828	-0.03	0.980	-5.02306	4.893684
_Ieduc_3	-.2043117	2.425172	-0.08	0.933	-4.957562	4.548938
_Ieduc_4	0	(omitted)				
_Ieduc_5	.5468814	2.47638	0.22	0.825	-4.306734	5.400497
_Ieduc_6	-.5396204	2.395021	-0.23	0.822	-5.233776	4.154535
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-.914781	4.041769	-0.23	0.821	-8.836503	7.006941
occ2w2	-1.085289	4.050896	-0.27	0.789	-9.024899	6.854322
occ3w2	-2.01676	4.099586	-0.49	0.623	-10.0518	6.018282
occ4w2	-1.281739	4.07837	-0.31	0.753	-9.275197	6.711719
occ5w2	-2.386463	4.187943	-0.57	0.569	-10.59468	5.821754
occ6w2	1.041656	4.356584	0.24	0.811	-7.497091	9.580403
occ7w2	-.2042994	4.128602	-0.05	0.961	-8.296212	7.887613
occ8w2	0	(omitted)				
marrw21	11.19923	1268.681	0.01	0.993	-2475.369	2497.767
marrw22	0	(omitted)				
marrw23	11.00787	1268.681	0.01	0.993	-2475.56	2497.576
marrw25	0	(omitted)				
marrw26	9.989133	1268.682	0.01	0.994	-2476.582	2496.56
inc1w2	2.592204	4.16321	0.62	0.534	-5.567537	10.75195

inc2w2	3.029964	4.086266	0.74	0.458	-4.978969	11.0389
inc3w2	2.803138	4.089233	0.69	0.493	-5.211611	10.81789
inc4w2	0	(omitted)				
radhlw2	.0158792	.0090915	1.75	0.081	-.0019397	.0336982
havmil	-.0002765	.0085069	-0.03	0.974	-.0169497	.0163966
avgcumdosew2	-.0370642	.0826057	-0.45	0.654	-.1989685	.1248401
bf1	.0019651	.0129727	0.15	0.880	-.0234608	.0273911
bf4	-.2487796	.05911	-4.21	0.000	-.3646331	-.1329261
bf6	.0163867	.0108586	1.51	0.131	-.0048957	.0376692
bf7	.0671464	.105745	0.63	0.525	-.1401099	.2744028
bf14	-.0000488	.0000798	-0.61	0.541	-.0002053	.0001076
bf15	0	(omitted)				
bf40	.3417099	.1521463	2.25	0.025	.0435086	.6399112
deaw2	.0342021	.3561465	0.10	0.923	-.6638321	.7322364
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	-.0684013	.5282538	-0.13	0.897	-1.10376	.9669571
movew2	.1688384	.5667796	0.30	0.766	-.9420292	1.279706
illw2	.2358444	.3235455	0.73	0.466	-.398293	.8699819
shfamw2	-.0126799	.0083767	-1.51	0.130	-.0290979	.0037381
shhlw2	-.01343	.0100141	-1.34	0.180	-.0330573	.0061973
shjobw2	.0172317	.0096379	1.79	0.074	-.0016582	.0361216
shrelaw2	-.0093206	.0085022	-1.10	0.273	-.0259847	.0073434
suprtw2	.0077123	.0077451	1.00	0.319	-.0074679	.0228925
suchrw2	.0029045	.0070402	0.41	0.680	-.0108941	.016703
havmilsq	-1.32e-06	.0000139	-0.10	0.924	-.0000286	.0000259
radhlw2	0	(omitted)				
_cons	-16.32451	1268.684	-0.01	0.990	-2502.9	2470.251

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	47	15	62
-	19	167	186
Total	66	182	248

```
Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   71.21%
Specificity                     Pr( -|~D)   91.76%
Positive predictive value       Pr( D| +)   75.81%
Negative predictive value       Pr(~D| -)   89.78%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    8.24%
False - rate for true D         Pr( -| D)   28.79%
False + rate for classified +   Pr(~D| +)   24.19%
False - rate for classified -   Pr( D| -)   10.22%
--------------------------------------------------
Correctly classified                        86.29%
--------------------------------------------------
```

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       248
 number of covariate patterns =       248
           Pearson chi2(209) =       320.07
                 Prob > chi2 =         0.0000
```

Measures of Fit for **logistic** of **HP2sxlife**

```
Log-Lik Intercept Only:      -143.684   Log-Lik Full Model:            -81.460
D(198):                       162.919   LR(38):                        124.448
                                        Prob > LR:                       0.000
McFadden's R2:                  0.433   McFadden's Adj R2:               0.085
Maximum Likelihood R2:          0.395   Cragg & Uhler's R2:              0.575
McKelvey and Zavoina's R2:      0.701   Efron's R2:                      0.489
Variance of y*:                11.005   Variance of error:               3.290
Count R2:                       0.863   Adj Count R2:                    0.485
AIC:                            1.060   AIC*n:                         262.919
BIC:                         -928.740   BIC':                           85.062
```

```
*****************************************************************************
> *
*****************************************************************************
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****     Full Nottingham Part 2 subscale models for male & females       ****
> *
*****             Full main model for HP2sxlife for wave= 2             ****
> *
*****     chunk 7 H1 test:Gender= 2  model Wave =  2 for HP2sxlife        ****
> *
*****                                                                   ****
> *
*****                                                                   ****
> *
*****                                     17 Jun 2012    10:08:30  ****
> *
*****************************************************************************
> *
*****************************************************************************
> *


i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity

Logistic regression                               Number of obs   =        362
                                                  LR chi2(45)     =     172.53
                                                  Prob > chi2     =     0.0000
Log likelihood = -119.99963                       Pseudo R2       =     0.4182
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0946676	.020348	4.65	0.000	.0547862	.1345489
_Ieduc_2	-12.06916	856.9725	-0.01	0.989	-1691.704	1667.566
_Ieduc_3	-10.96566	856.9724	-0.01	0.990	-1690.601	1668.669
_Ieduc_4	-10.2721	856.9727	-0.01	0.990	-1689.908	1669.364
_Ieduc_5	-11.78295	856.9726	-0.01	0.989	-1691.418	1667.853
_Ieduc_6	-10.87488	856.9725	-0.01	0.990	-1690.51	1668.76
_Ieduc_7	-10.54712	856.9809	-0.01	0.990	-1690.199	1669.105
_Ieduc_8	0	(omitted)				
occ1w2	-1.924676	1.67129	-1.15	0.249	-5.200344	1.350992
occ2w2	-1.071334	1.695639	-0.63	0.528	-4.394725	2.252058
occ3w2	-.4988122	1.696518	-0.29	0.769	-3.823926	2.826301
occ4w2	-.6837643	1.779367	-0.38	0.701	-4.171259	2.803731
occ5w2	-.8653809	1.874647	-0.46	0.644	-4.539621	2.80886
occ6w2	-1.70777	1.969995	-0.87	0.386	-5.568889	2.153348
occ7w2	-.9209399	1.641247	-0.56	0.575	-4.137725	2.295845
occ8w2	-.5235734	1.936624	-0.27	0.787	-4.319287	3.272141
marrw21	-.4474367	1.15873	-0.39	0.699	-2.718505	1.823632
marrw22	-.2713813	1.430959	-0.19	0.850	-3.07601	2.533247
marrw23	-.6859987	.8247327	-0.83	0.406	-2.302445	.9304478
marrw25	-1.534831	1.287976	-1.19	0.233	-4.059218	.9895558
marrw26	0	(omitted)				
inc1w2	.1793057	1.714781	0.10	0.917	-3.181602	3.540214
inc2w2	.5322943	1.648367	0.32	0.747	-2.698446	3.763035
inc3w2	-.4148838	1.696991	-0.24	0.807	-3.740924	2.911157
inc4w2	-.3610821	2.088477	-0.17	0.863	-4.454421	3.732257
radhlw2	.0084415	.0066869	1.26	0.207	-.0046645	.0215475
havmil	-.0012719	.0033206	-0.38	0.702	-.0077802	.0052364
avgcumdosew2	.131101	.1238204	1.06	0.290	-.1115826	.3737846
bf1	-.0011966	.0090476	-0.13	0.895	-.0189295	.0165364
bf4	-.1626538	.0410542	-3.96	0.000	-.2431185	-.0821891
bf6	-.0040259	.0075131	-0.54	0.592	-.0187513	.0106995
bf7	-.07395	.0811067	-0.91	0.362	-.2329163	.0850162
bf14	-.000028	.0000759	-0.37	0.712	-.0001769	.0001208
bf15	0	(omitted)				
bf40	.0142117	.0784184	0.18	0.856	-.1394855	.1679089
deaw2	.0365782	.2150994	0.17	0.865	-.3850089	.4581654
dvcew2	-.8025004	1.585115	-0.51	0.613	-3.909268	2.304268
sepaw2	-.5574826	2.582905	-0.22	0.829	-5.619883	4.504918
accdw2	-.5477504	.6503834	-0.84	0.400	-1.822478	.7269777
movew2	.1966685	.5120534	0.38	0.701	-.8069378	1.200275
illw2	.5493357	.2439985	2.25	0.024	.0711074	1.027564
shfamw2	.0017721	.0066016	0.27	0.788	-.0111667	.0147109
shhlw2	.0069859	.006691	1.04	0.296	-.0061281	.0201
shjobw2	-.0075261	.0063225	-1.19	0.234	-.019918	.0048658
shrelaw2	-.0137558	.0073868	-1.86	0.063	-.0282337	.000722
suprtw2	-.0141433	.0055222	-2.56	0.010	-.0249667	-.0033199

suchrw2	**.0162332**	**.0063006**	**2.58**	**0.010**	**.0038842**	**.0285821**
havmilsq	**-1.92e-07**	**2.92e-06**	**-0.07**	**0.948**	**-5.91e-06**	**5.53e-06**
radhlw2	**0**	(omitted)				
_cons	**7.796544**	**856.9744**	**0.01**	**0.993**	**-1671.842**	**1687.436**

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	**59**	**19**	**78**
-	**34**	**250**	**284**
Total	**93**	**269**	**362**

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	**63.44%**
Specificity	Pr(-|~D)	**92.94%**
Positive predictive value	Pr(D| +)	**75.64%**
Negative predictive value	Pr(~D| -)	**88.03%**
False + rate for true ~D	Pr(+|~D)	**7.06%**
False - rate for true D	Pr(-| D)	**36.56%**
False + rate for classified +	Pr(~D| +)	**24.36%**
False - rate for classified -	Pr(D| -)	**11.97%**
Correctly classified		**85.36%**

Logistic model for HP2sxlife, goodness-of-fit test

number of observations = **362**
number of covariate patterns = **362**
Pearson chi2(**316**) = **350.60**
Prob > chi2 = **0.0877**

Measures of Fit for **logistic** of **HP2sxlife**

```
Log-Lik Intercept Only:     -206.266    Log-Lik Full Model:         -120.000
D(312):                      239.999    LR(45):                      172.533
                                        Prob > LR:                     0.000
McFadden's R2:                 0.418    McFadden's Adj R2:             0.176
Maximum Likelihood R2:         0.379    Cragg & Uhler's R2:            0.557
McKelvey and Zavoina's R2:     0.643    Efron's R2:                    0.461
Variance of y*:                9.209    Variance of error:             3.290
Count R2:                      0.854    Adj Count R2:                  0.430
AIC:                           0.939    AIC*n:                       339.999
BIC:                       -1598.194    BIC':                         92.591

911 .
912 . *-----Chunk 7 dose3 moderator => sex life impact----------------------------
913 . title4 "Chunk 7 trimmed male model of dose=>HP2sxlife relationship in Wave 2
    > "
    ------------------------------------------------------------------------------
    Chunk 7 trimmed male model of dose=>HP2sxlife relationship in Wave 2
    ------------------------------------------------------------------------------

914 .
915 .
916 .         forvalues j = 2/2 {
  2.            set more off
  3. di as input  "trimmed HP2sexlife main effects models wave 2 for H1 part 2
    >  with dose ns"
  4. di as input  "Wave 2 male dose avgcumdosew`j' main effect not signif"
  5.            logit HP2sxlife age  bf4 bf40  shjobw`j' shrelaw`j' ///
    >           avgcumdosew`j' radhlw`j' if gender==1
  6.                            estat class
  7.                            estat gof
  8.                            fitstat
  9. }
trimmed HP2sexlife main effects models wave 2 for H1 part 2 with dose ns
Wave 2 male dose avgcumdosew2 main effect not signif

Iteration 0:   log likelihood = -171.28676
Iteration 1:   log likelihood = -117.44151
Iteration 2:   log likelihood = -108.76579
Iteration 3:   log likelihood =  -108.4925
Iteration 4:   log likelihood = -108.49198
Iteration 5:   log likelihood = -108.49198

Logistic regression                               Number of obs   =        339
                                                  LR chi2(7)      =     125.59
                                                  Prob > chi2     =     0.0000
Log likelihood = -108.49198                       Pseudo R2       =     0.3666
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0692209	.0165755	4.18	0.000	.0367336	.1017083
bf4	-.1778019	.0383619	-4.63	0.000	-.2529899	-.1026139
bf40	.2569586	.1044384	2.46	0.014	.052263	.4616542
shjobw2	.0128933	.0053503	2.41	0.016	.002407	.0233797
shrelaw2	-.0156464	.0059351	-2.64	0.008	-.0272789	-.0040138
avgcumdosew2	.0651668	.0461706	1.41	0.158	-.025326	.1556596
radhlw2	.0107755	.0056169	1.92	0.055	-.0002334	.0217845
_cons	-4.746559	1.209875	-3.92	0.000	-7.117869	-2.375248

Logistic model for HP2sxlife

	True		
Classified	D	~D	Total
+	35	17	52
-	34	253	287
Total	69	270	339

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	50.72%
Specificity	Pr(-|~D)	93.70%
Positive predictive value	Pr(D| +)	67.31%
Negative predictive value	Pr(~D| -)	88.15%
False + rate for true ~D	Pr(+|~D)	6.30%
False - rate for true D	Pr(-| D)	49.28%
False + rate for classified +	Pr(~D| +)	32.69%
False - rate for classified -	Pr(D| -)	11.85%
Correctly classified		84.96%

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       337
             Pearson chi2(329) =       258.99
                   Prob > chi2 =         0.9983
```

Measures of Fit for **logit** of **HP2sxlife**

```
Log-Lik Intercept Only:      -171.287   Log-Lik Full Model:          -108.492
D(331):                       216.984   LR(7):                        125.590
                                        Prob > LR:                      0.000
McFadden's R2:                  0.367   McFadden's Adj R2:              0.320
Maximum Likelihood R2:          0.310   Cragg & Uhler's R2:             0.487
McKelvey and Zavoina's R2:      0.539   Efron's R2:                     0.374
Variance of y*:                 7.131   Variance of error:              3.290
Count R2:                       0.850   Adj Count R2:                   0.261
AIC:                            0.687   AIC*n:                        232.984
BIC:                        -1711.422   BIC':                         -84.808

.
.
. title "Chunk 7 trimmed male model of dose and HP2sxlife relationship in Wave
>  2"


****************************************************************************
> *
****************************************************************************
> *
*****                                                                  ****
> *
*****                                                                  ****
> *
*****Chunk 7 trimmed male model of dose and HP2sxlife relationship in Wave 2**
> ***
*****                                                                  ****
> *
*****                                                                  ****
> *
*****                                         17 Jun 2012    10:08:33  ****
> *
****************************************************************************
> *
****************************************************************************
> *
```

```
920 . title4 "h1 pt 2 wave 2 dose=> sex life impact on males"

    h1 pt 2 wave 2 dose=> sex life impact on males


921 .         forvalues j = 2/2 {
      2. set more off
      3. di as input  "fully trimmed HP2sexlife main effects models wave 2 for H1
    > part 2 with dose ns"
      4. di as input  "Wave 2 male dose avgcumdosew`j' main effect not signif"
      5.          logit HP2sxlife age  bf4 bf40  shjobw`j' shrelaw`j'  radhlw`j' if
    >  gender==1
      6.                          estat class
      7.                          estat gof
      8.                          fitstat
      9. }
    fully trimmed HP2sexlife main effects models wave 2 for H1 part 2 with dose ns
    Wave 2 male dose avgcumdosew2 main effect not signif

    Iteration 0:   log likelihood = -171.28676
    Iteration 1:   log likelihood = -118.10861
    Iteration 2:   log likelihood = -109.63863
    Iteration 3:   log likelihood = -109.40374
    Iteration 4:   log likelihood =  -109.4033
    Iteration 5:   log likelihood =  -109.4033

    Logistic regression                               Number of obs   =        339
                                                      LR chi2(6)      =     123.77
                                                      Prob > chi2     =     0.0000
    Log likelihood =  -109.4033                       Pseudo R2       =     0.3613
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0705974	.0164196	4.30	0.000	.0384155	.1027793
bf4	-.1718905	.0378146	-4.55	0.000	-.2460057	-.0977752
bf40	.2536857	.1036173	2.45	0.014	.0505995	.4567718
shjobw2	.0130156	.0053119	2.45	0.014	.0026045	.0234267
shrelaw2	-.0151881	.005885	-2.58	0.010	-.0267224	-.0036537
radhlw2	.01122	.0055806	2.01	0.044	.0002821	.0221578
_cons	-4.840268	1.202272	-4.03	0.000	-7.196679	-2.483857

```
    Logistic model for HP2sxlife
```

Classified	True D	~D	Total
+	**35**	**16**	**51**
-	**34**	**254**	**288**
Total	**69**	**270**	**339**

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	**50.72%**
Specificity	Pr(-|~D)	**94.07%**
Positive predictive value	Pr(D| +)	**68.63%**
Negative predictive value	Pr(~D| -)	**88.19%**
False + rate for true ~D	Pr(+|~D)	**5.93%**
False - rate for true D	Pr(-| D)	**49.28%**
False + rate for classified +	Pr(~D| +)	**31.37%**
False - rate for classified -	Pr(D| -)	**11.81%**
Correctly classified		**85.25%**

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       336
            Pearson chi2(329) =       260.66
                  Prob > chi2 =         0.9978
```

Measures of Fit for **logit** of **HP2sxlife**

Log-Lik Intercept Only:	**-171.287**	Log-Lik Full Model:	**-109.403**
D(332):	**218.807**	LR(6):	**123.767**
		Prob > LR:	**0.000**
McFadden's R2:	**0.361**	McFadden's Adj R2:	**0.320**
Maximum Likelihood R2:	**0.306**	Cragg & Uhler's R2:	**0.481**
McKelvey and Zavoina's R2:	**0.533**	Efron's R2:	**0.369**
Variance of y*:	**7.046**	Variance of error:	**3.290**
Count R2:	**0.853**	Adj Count R2:	**0.275**
AIC:	**0.687**	AIC*n:	**232.807**
BIC:	**-1715.425**	BIC':	**-88.811**

```
922 .
923 . des bf4 bf40

              storage   display    value
variable name   type    format     label      variable label
------------------------------------------------------------------------------
bf4             float   %9.0g                 bf4 = max(0, 24 - BSIsoma)
bf40            float   %9.0g                 bf40 = max(0, icdxcnt -
                                                1.01635E-007)

924 . scalar MainEffsxlifeMw2 = "age bf4 bf40 shjobw2 shrelaw2 radhlw2"

925 . scalar SigDosesxlifeMw2 = "no"

926 .
927 .
928 . forvalues j = 2/2 {
  2. title "trimmed HP2sxlife main effects models wave `j' for H1 part 2 with
> dose ns"
  3. title2 "Wave `j dose HPsxlife relationship but avgcumdosew`j': Dose not s
> ignif"
  4. }


******************************************************************************
> *
******************************************************************************
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****trimmed HP2sxlife main effects models wave 2 for H1 part 2 with dose ns**
> ***
*****                                                                     ****
> *
*****                                                                     ****
> *
*****                                            17 Jun 2012    10:08:35  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

```
title2: Wave `j dose HPsxlife relationship but avgcumdosew2: Dose not signif
                                       Date and time:  17 Jun 2012    10:08:35
                                       Working directory:  /Users/robertyaffee
> /Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2
                                       Stata data file:  chwide16june2012.dta
>  has  2389  variables and  703  observations

Wave `j dose HPsxlife relationship but avgcumdosew2: Dose not signif
```

```
929 .
930 .
931 . cap gen radhlw2Xd2 = radhlw2*avgcumdosew2

932 .
933 . set more off

934 . des bf4

              storage  display     value
variable name   type   format      label      variable label
--------------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)

935 . forvalues j = 2/2 {
  2.                 sw, pr(.1):logistic HP2sxlife age bf4  ///
>                 avgcumdosew`j'  ageXd2 b4Xd2 radhlw2Xd2 shrelaw2Xd2 if gende
> r==1, coef
  3.                         estat class
  4.                         estat gof
  5.                         fitstat
  6. }
                      begin with full model
p = 0.9312 >= 0.1000  removing avgcumdosew2
p = 0.5672 >= 0.1000  removing shrelaw2Xd2
p = 0.2145 >= 0.1000  removing b4Xd2
p = 0.3019 >= 0.1000  removing radhlw2Xd2
p = 0.1093 >= 0.1000  removing ageXd2

Logistic regression                               Number of obs   =        339
                                                  LR chi2(2)      =     105.12
                                                  Prob > chi2     =     0.0000
Log likelihood = -118.72735                       Pseudo R2       =     0.3069
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
age	.0733348	.015158	4.84	0.000	.0436256	.1030439
bf4	-.2009901	.0322101	-6.24	0.000	-.2641207	-.1378596
_cons	-3.045295	.9455387	-3.22	0.001	-4.898517	-1.192073

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	32	14	46
-	37	256	293
Total	69	270	339

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	46.38%
Specificity	Pr(-|~D)	94.81%
Positive predictive value	Pr(D| +)	69.57%
Negative predictive value	Pr(~D| -)	87.37%
False + rate for true ~D	Pr(+|~D)	5.19%
False - rate for true D	Pr(-| D)	53.62%
False + rate for classified +	Pr(~D| +)	30.43%
False - rate for classified -	Pr(D| -)	12.63%
Correctly classified		84.96%

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       339
 number of covariate patterns =       221
             Pearson chi2(218) =       214.23
                   Prob > chi2 =         0.5595
```

Measures of Fit for **logistic** of **HP2sxlife**

```
    Log-Lik Intercept Only:     -171.287     Log-Lik Full Model:          -118.727
    D(336):                      237.455     LR(2):                        105.119
                                             Prob > LR:                      0.000
    McFadden's R2:                 0.307     McFadden's Adj R2:              0.289
    Maximum Likelihood R2:         0.267     Cragg & Uhler's R2:             0.419
    McKelvey and Zavoina's R2:     0.435     Efron's R2:                     0.319
    Variance of y*:                5.823     Variance of error:              3.290
    Count R2:                      0.850     Adj Count R2:                   0.261
    AIC:                           0.718     AIC*n:                        243.455
    BIC:                       -1720.081     BIC':                         -93.467

936 .
937 . scalar sxlifeModMw2 = "none"

938 . *xx male moderators: no main significant dose effect
939 . *xx no male moderators for sexlife impact
940 .
941 .
942 .
943 . title4 "H1 pt2 wave 2 female dose=> sexlife impact models"
    ______________________________________________________________________________

    H1 pt2 wave 2 female dose=> sexlife impact models
    ______________________________________________________________________________


944 .
945 .  *-----Chunk 7 dose3 moderator => sex life impact---------------------------
    > -
946 . di as input "chunk 7  female wave=3"
    chunk 7  female wave=3

947 . title "Chunk 7 trimmed female model:" "dose and HP2sxlife relationship in Wa
    > ve 2"


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
    > *
    *****                  Chunk 7 trimmed female model:                      ****
    > *
    *****            dose and HP2sxlife relationship in Wave 2                ****
    > *
    *****                                                                     ****
    > *
    *****                                                                     ****
```

```
> *
*****                                          17 Jun 2012    10:08:44  ****
> *
****************************************************************************
> *
****************************************************************************
> *



948 . * female models
949 .         forvalues j = 2/2 {
  2.
950 . set more off
  3. des bf4 bf4m shfamw2 shrelaw2 avgcumdosew2
  4. title4 "trimmed HP2sexlife main effects models" "Wave 2 for H1 part 2 wit
> h dose ns"
  5. title4 "Wave 2 dose HP2sexlife relationship" "avgcumdosew`j' Dose not sig
> nif"
  6.         logit HP2sxlife age  radhlw`j' bf4 bf4m   ///
>            shrelaw`j' avgcumdosew`j'  if gender==2
  7.                          estat class
  8.                          estat gof
  9.                          fitstat
 10. }

              storage  display     value
variable name   type   format      label      variable label
----------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
shfamw2         double %8.0g                  Percentage of strains and
                                                hassles related to family in
                                                1996
shrelaw2        double %8.0g                  Percentage of strains and
                                                hassles related to
                                                relationships in 1996
avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                for wave 2
----------------------------------------------------------------------------

trimmed HP2sexlife main effects models
----------------------------------------------------------------------------
----------------------------------------------------------------------------
Wave 2 dose HP2sexlife relationship
----------------------------------------------------------------------------
```

```
Iteration 0:   log likelihood = -207.62116
Iteration 1:   log likelihood = -146.12472
Iteration 2:   log likelihood =   -140.853
Iteration 3:   log likelihood = -140.77782
Iteration 4:   log likelihood = -140.77773
Iteration 5:   log likelihood = -140.77773

Logistic regression                               Number of obs   =        363
                                                  LR chi2(6)      =     133.69
                                                  Prob > chi2     =     0.0000
Log likelihood = -140.77773                       Pseudo R2       =     0.3219
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0769754	.0151437	5.08	0.000	.0472942	.1066565
radhlw2	.0086172	.004779	1.80	0.071	-.0007494	.0179837
bf4	-.5726666	.1897808	-3.02	0.003	-.9446301	-.2007032
bf4m	.3839121	.1738091	2.21	0.027	.0432526	.7245716
shrelaw2	-.0125758	.0051727	-2.43	0.015	-.0227141	-.0024375
avgcumdosew2	.1836146	.10587	1.73	0.083	-.0238868	.3911161
_cons	-6.850254	1.580753	-4.33	0.000	-9.948473	-3.752035

Logistic model for HP2sxlife

	True		
Classified	D	~D	Total
+	52	21	73
-	42	248	290
Total	94	269	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	55.32%
Specificity	Pr(-|~D)	92.19%
Positive predictive value	Pr(D| +)	71.23%
Negative predictive value	Pr(~D| -)	85.52%
False + rate for true ~D	Pr(+|~D)	7.81%
False - rate for true D	Pr(-| D)	44.68%
False + rate for classified +	Pr(~D| +)	28.77%
False - rate for classified -	Pr(D| -)	14.48%
Correctly classified		82.64%

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       363
 number of covariate patterns =       362
            Pearson chi2(355) =       403.58
                  Prob > chi2 =         0.0383

Measures of Fit for logit of HP2sxlife

Log-Lik Intercept Only:     -207.621    Log-Lik Full Model:          -140.778
D(356):                      281.555    LR(6):                        133.687
                                        Prob > LR:                      0.000
McFadden's R2:                 0.322    McFadden's Adj R2:              0.288
Maximum Likelihood R2:         0.308    Cragg & Uhler's R2:             0.452
McKelvey and Zavoina's R2:     0.478    Efron's R2:                     0.375
Variance of y*:                6.297    Variance of error:              3.290
Count R2:                      0.826    Adj Count R2:                   0.330
AIC:                           0.814    AIC*n:                        295.555
BIC:                       -1816.852    BIC':                         -98.320

951 . scalar SigDoseSxlifeFw2 = "no"

952 . scalar MainEffsxlifeFw2 = "age bf4 bf4m shrelaw2"

953 . *-----  constructing possible moderators
954 .
955 .       foreach var in bf4 bf4m shfamw2 shrelaw2 radhlw2 {
  2.         cap gen `var'Xd2 = `var'*avgcumdosew2
  3.           }

956 .
957 . scalar sxlifeModFw2="none"

958 . scalar SigDoseSxlifeFw2 = "none"
```

```
959 .
960 .
961 .
962 .  *----- testing female moderators
963 . title "partly trimmed female moderator model of dose & HP2sxlife relationshi
    > p in wv 3"


    ****************************************************************************
    > *
    ****************************************************************************
    > *
    *****                                                                   ****
    > *
    *****                                                                   ****
    > *
    *****partly trimmed female moderator model of dose & HP2sxlife relationship in
    >  wv 3*****
    *****                                                                   ****
    > *
    *****                                                                   ****
    > *
    *****                                          17 Jun 2012    10:08:46  ****
    > *
    ****************************************************************************
    > *
    ****************************************************************************
    > *



964 . * male models
965 .         forvalues j = 2/2 {
      2. set more off
      3. des bf4 bf4m shfamw2 shrelaw2 avgcumdosew2
      4. title3 "trimmed HP2sexlife main effects models wave 2 for H1 part 2 with
    > dose ns"
      5. title "Wave 2 dose HP2sexlife relationship but avgcumdosew`j': Dose not s
    > ignif"
      6.          logit HP2sxlife age  radhlw`j' bf4 bf4m   ///
    >             shrelaw`j' avgcumdosew`j' radhlw`j'Xd2 ///
    >             bf4Xd2 shrelaw2Xd2  if gender==2
      7.                          estat class
      8.                          estat gof
      9.                          fitstat
     10. }
```

```
                storage  display     value
variable name     type   format      label      variable label
-------------------------------------------------------------------------------
bf4               float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf4m              float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
shfamw2           double %8.0g                  Percentage of strains and
                                                  hassles related to family in
                                                  1996
shrelaw2          double %8.0g                  Percentage of strains and
                                                  hassles related to
                                                  relationships in 1996
avgcumdosew2      double %8.0g                  Average mean dose CS1337 in mGy
                                                  for wave 2
-------------------------------------------------------------------------------

title3 : trimmed HP2sexlife main effects models wave 2 for H1 part 2 with dose
>  ns
17 Jun 2012
10:08:46
computer  Macintosh (Intel 64-bit)
folder  /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests
> /h1pt2
Data file  chwide16june2012.dta  currrently has  2391  variables and  703  obs
> ervations


******************************************************************************
> *
******************************************************************************
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****Wave 2 dose HP2sexlife relationship but avgcumdosew2: Dose not signif****
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****                                          17 Jun 2012    10:08:46  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

```
Iteration 0:   log likelihood = -207.62116
Iteration 1:   log likelihood = -144.70934
Iteration 2:   log likelihood = -139.49886
Iteration 3:   log likelihood = -139.40604
Iteration 4:   log likelihood = -139.40547
Iteration 5:   log likelihood = -139.40547

Logistic regression                               Number of obs   =        363
                                                  LR chi2(9)      =     136.43
                                                  Prob > chi2     =     0.0000
Log likelihood = -139.40547                       Pseudo R2       =     0.3286
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0769717	.0151574	5.08	0.000	.0472638	.1066797
radhlw2	.0057223	.0059638	0.96	0.337	-.0059666	.0174112
bf4	-.5293431	.1942546	-2.72	0.006	-.9100751	-.148611
bf4m	.4034483	.177566	2.27	0.023	.0554253	.7514713
shrelaw2	-.0078072	.0074873	-1.04	0.297	-.022482	.0068677
avgcumdosew2	.6934064	.5417467	1.28	0.201	-.3683976	1.755211
radhlw2Xd2	.0041899	.0048672	0.86	0.389	-.0053497	.0137295
bf4Xd2	-.0848776	.0712662	-1.19	0.234	-.2245568	.0548016
shrelaw2Xd2	-.0065332	.0070873	-0.92	0.357	-.020424	.0073577
_cons	-7.400257	1.693844	-4.37	0.000	-10.72013	-4.080384

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	52	21	73
-	42	248	290
Total	94	269	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	55.32%
Specificity	Pr(-|~D)	92.19%
Positive predictive value	Pr(D| +)	71.23%
Negative predictive value	Pr(~D| -)	85.52%
False + rate for true ~D	Pr(+|~D)	7.81%
False - rate for true D	Pr(-| D)	44.68%
False + rate for classified +	Pr(~D| +)	28.77%
False - rate for classified -	Pr(D| -)	14.48%

```
---------------------------------------------------
Correctly classified                        82.64%
---------------------------------------------------

Logistic model for HP2sxlife, goodness-of-fit test
---------------------------------------------------

       number of observations =       363
 number of covariate patterns =       362
            Pearson chi2(352) =       396.16
                  Prob > chi2 =         0.0521

Measures of Fit for logit of HP2sxlife

Log-Lik Intercept Only:     -207.621   Log-Lik Full Model:          -139.405
D(353):                      278.811   LR(9):                        136.431
                                       Prob > LR:                      0.000
McFadden's R2:                 0.329   McFadden's Adj R2:              0.280
Maximum Likelihood R2:         0.313   Cragg & Uhler's R2:             0.460
McKelvey and Zavoina's R2:     0.511   Efron's R2:                     0.381
Variance of y*:                6.728   Variance of error:              3.290
Count R2:                      0.826   Adj Count R2:                   0.330
AIC:                           0.823   AIC*n:                        298.811
BIC:                       -1801.913   BIC':                         -83.382

966 . // trimming further
967 . title "fully female moderator model of dose & HP2sxlife relationship in wv 3
    > "


    ******************************************************************************
    > *
    ******************************************************************************
    > *
    *****                                                                    ****
    > *
    *****                                                                    ****
    > *
    *****fully female moderator model of dose & HP2sxlife relationship in wv 3****
    > *
    *****                                                                    ****
    > *
    *****                                                                    ****
    > *
    *****                                              17 Jun 2012    10:08:47  ****
    > *
    ******************************************************************************
    > *
    ******************************************************************************
```

```
> *

968 .
969 .
970 . * female models
971 . set more off

972 .         forvalues j = 2/2 {
  2. des bf4 bf4m shfamw2 shrelaw2 avgcumdosew2
  3. title3 "trimmed HP2sexlife main effects models wave 2 for H1 part 2 with
> dose ns"
  4. title "Wave 2 dose HP2sexlife relationship but avgcumdosew`j': Dose not s
> ignif"
  5.         logit HP2sxlife age  radhlw`j' bf4 bf4m   ///
>            shrelaw2   avgcumdosew`j'  ///
>           shrelaw2Xd2 if gender==2
  6.                         estat class
  7.                         estat gof
  8.                         fitstat
  9. }

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
shfamw2         double %8.0g                  Percentage of strains and
                                                hassles related to family in
                                                1996
shrelaw2        double %8.0g                  Percentage of strains and
                                                hassles related to
                                                relationships in 1996
avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                for wave 2
-------------------------------------------------------------------------------

title3 : trimmed HP2sexlife main effects models wave 2 for H1 part 2 with dose
>  ns
17 Jun 2012
10:08:47
computer  Macintosh (Intel 64-bit)
folder  /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests
> /h1pt2
Data file  chwide16june2012.dta  currrently has  2391  variables and  703  obs
> ervations
```

```
*****************************************************************************
> *
*****************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****Wave 2 dose HP2sexlife relationship but avgcumdosew2: Dose not signif****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                          17 Jun 2012    10:08:47   ****
> *
*****************************************************************************
> *
*****************************************************************************
> *
```

```
Iteration 0:   log likelihood = -207.62116
Iteration 1:   log likelihood = -146.11433
Iteration 2:   log likelihood = -140.84565
Iteration 3:   log likelihood = -140.77068
Iteration 4:   log likelihood =  -140.7706
Iteration 5:   log likelihood =  -140.7706

Logistic regression                               Number of obs   =        363
                                                  LR chi2(7)      =     133.70
                                                  Prob > chi2     =     0.0000
Log likelihood =  -140.7706                       Pseudo R2       =     0.3220
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0768976	.0151557	5.07	0.000	.047193	.1066023
radhlw2	.0086944	.0048244	1.80	0.072	-.0007613	.01815
bf4	-.573012	.189755	-3.02	0.003	-.944925	-.201099
bf4m	.3843277	.1738016	2.21	0.027	.0436827	.7249726
shrelaw2	-.0121114	.0064605	-1.87	0.061	-.0247738	.0005511
avgcumdosew2	.1989447	.1682782	1.18	0.237	-.1308745	.5287638
shrelaw2Xd2	-.0004728	.0039577	-0.12	0.905	-.0082297	.0072841
_cons	-6.867737	1.587757	-4.33	0.000	-9.979683	-3.755791

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	**52**	**22**	**74**
-	**42**	**247**	**289**
Total	**94**	**269**	**363**

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	**55.32%**
Specificity	Pr(-|~D)	**91.82%**
Positive predictive value	Pr(D| +)	**70.27%**
Negative predictive value	Pr(~D| -)	**85.47%**
False + rate for true ~D	Pr(+|~D)	**8.18%**
False - rate for true D	Pr(-| D)	**44.68%**
False + rate for classified +	Pr(~D| +)	**29.73%**
False - rate for classified -	Pr(D| -)	**14.53%**
Correctly classified		**82.37%**

Logistic model for HP2sxlife, goodness-of-fit test

number of observations = **363**
number of covariate patterns = **362**
Pearson chi2(**354**) = **403.17**
Prob > chi2 = **0.0365**

Measures of Fit for **logit** of **HP2sxlife**

Log-Lik Intercept Only:	**-207.621**	Log-Lik Full Model:	**-140.771**
D(355):	**281.541**	LR(7):	**133.701**
		Prob > LR:	**0.000**
McFadden's R2:	**0.322**	McFadden's Adj R2:	**0.283**
Maximum Likelihood R2:	**0.308**	Cragg & Uhler's R2:	**0.452**
McKelvey and Zavoina's R2:	**0.478**	Efron's R2:	**0.375**
Variance of y*:	**6.298**	Variance of error:	**3.290**
Count R2:	**0.824**	Adj Count R2:	**0.319**
AIC:	**0.820**	AIC*n:	**297.541**
BIC:	**-1810.972**	BIC':	**-92.440**

```
973 . * female models
974 .         forvalues j = 2/2 {
  2. des bf4 bf4m shfamw2 shrelaw2 avgcumdosew2
  3. title3 "trimmed HP2sexlife main effects models wave 2 for H1 part 2 with
> dose ns"
  4. title "Wave 2 dose HP2sexlife relationship but avgcumdosew`j': Dose not s
> ignif"
  5.          logit HP2sxlife age  radhlw`j' bf4 bf4m   ///
>             shrelaw2 shfamw`j'   ///
>           if gender==2
  6.                          estat class
  7.                          estat gof
  8.                          fitstat
  9. }

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
shfamw2         double %8.0g                  Percentage of strains and
                                                hassles related to family in
                                                1996
shrelaw2        double %8.0g                  Percentage of strains and
                                                hassles related to
                                                relationships in 1996
avgcumdosew2    double %8.0g                  Average mean dose CS1337 in mGy
                                                for wave 2
-------------------------------------------------------------------------------

title3 : trimmed HP2sexlife main effects models wave 2 for H1 part 2 with dose
>  ns
17 Jun 2012
10:08:49
computer  Macintosh (Intel 64-bit)
folder  /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests
> /h1pt2
Data file  chwide16june2012.dta  currrently has  2391  variables and  703  obs
> ervations
```

```
********************************************************************************
> *
********************************************************************************
> *
*****                                                                       ****
> *
*****                                                                       ****
> *
*****Wave 2 dose HP2sexlife relationship but avgcumdosew2: Dose not signif****
> *
*****                                                                       ****
> *
*****                                                                       ****
> *
*****                                              17 Jun 2012    10:08:49  ****
> *
********************************************************************************
> *
********************************************************************************
> *
```

```
Iteration 0:   log likelihood = -206.26609
Iteration 1:   log likelihood = -147.80582
Iteration 2:   log likelihood = -142.56802
Iteration 3:   log likelihood = -142.50325
Iteration 4:   log likelihood = -142.50319
Iteration 5:   log likelihood = -142.50319

Logistic regression                               Number of obs   =        362
                                                  LR chi2(6)      =     127.53
                                                  Prob > chi2     =     0.0000
Log likelihood = -142.50319                       Pseudo R2       =     0.3091
```

HP2sxlife	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0773867	.0151879	5.10	0.000	.0476189	.1071545
radhlw2	.0092803	.0047101	1.97	0.049	.0000487	.0185119
bf4	-.5791652	.1890895	-3.06	0.002	-.9497739	-.2085566
bf4m	.3860275	.1731752	2.23	0.026	.0466104	.7254445
shrelaw2	-.0111587	.0058224	-1.92	0.055	-.0225703	.000253
shfamw2	-.0012219	.005072	-0.24	0.810	-.0111628	.008719
_cons	-6.703691	1.604696	-4.18	0.000	-9.848837	-3.558545

Logistic model for HP2sxlife

Classified	True D	True ~D	Total
+	**49**	**23**	**72**
-	**44**	**246**	**290**
Total	**93**	**269**	**362**

Classified + if predicted Pr(D) >= .5
True D defined as HP2sxlife != 0

Sensitivity	Pr(+| D)	**52.69%**
Specificity	Pr(-|~D)	**91.45%**
Positive predictive value	Pr(D| +)	**68.06%**
Negative predictive value	Pr(~D| -)	**84.83%**
False + rate for true ~D	Pr(+|~D)	**8.55%**
False - rate for true D	Pr(-| D)	**47.31%**
False + rate for classified +	Pr(~D| +)	**31.94%**
False - rate for classified -	Pr(D| -)	**15.17%**
Correctly classified		**81.49%**

Logistic model for HP2sxlife, goodness-of-fit test

```
       number of observations =       362
  number of covariate patterns =      357
            Pearson chi2(350) =       401.39
                  Prob > chi2 =         0.0301
```

Measures of Fit for **logit** of **HP2sxlife**

Log-Lik Intercept Only:	**-206.266**	Log-Lik Full Model:	**-142.503**
D(355):	**285.006**	LR(6):	**127.526**
		Prob > LR:	**0.000**
McFadden's R2:	**0.309**	McFadden's Adj R2:	**0.275**
Maximum Likelihood R2:	**0.297**	Cragg & Uhler's R2:	**0.437**
McKelvey and Zavoina's R2:	**0.465**	Efron's R2:	**0.360**
Variance of y*:	**6.146**	Variance of error:	**3.290**
Count R2:	**0.815**	Adj Count R2:	**0.280**
AIC:	**0.826**	AIC*n:	**299.006**
BIC:	**-1806.527**	BIC':	**-92.176**

```
975 .
976 . scalar MainEffsxlifeFw2 = "age radhlw2 bf4 bf4m"

977 . scalar SigDoseSxlifeFw2="no"

978 . scalar SxLifeModFw2 = "no"

979 . * xx female main effects model: no sign dose main effect
980 . * xx 6 signif main effects
981 . * xx no moderator effects significant
982 .
983 . title4 "h1 pt 2 wave 2 dose-> sexlife sexlife mediator impact models"
    ------------------------------------------------------------------------------
    h1 pt 2 wave 2 dose-> sexlife sexlife mediator impact models
    ------------------------------------------------------------------------------

984 .
985 . di as input "testing possible sex life mediator effects for males"
    testing possible sex life mediator effects for males

986 .
987 . * age is a mediating effect for males for Dose=> sex life for men
988 . des bf4 bf4m

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)

989 . glm age avgcumdosew2 if gender==1, fam(gaus) link(identity)

    Iteration 0:   log likelihood = -1330.6004

    Generalized linear models                          No. of obs      =       340
    Optimization     : ML                              Residual df     =       338
                                                       Scale parameter =  147.6853
    Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
    Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

    Variance function: V(u) = 1                        [Gaussian]
    Link function    : g(u) = u                        [Identity]

                                                       AIC             =  7.838826
    Log likelihood   =   -1330.6004                    BIC             =  47947.46
```

```
------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .5832314   .2635871     2.21   0.027     .0666101    1.099853
       _cons |   48.62133   .7061562    68.85   0.000     47.23729    50.00537
------------------------------------------------------------------------------

990 . glm HP2sxlife age  if gender==1, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =    287.05
    Iteration 2:   deviance =  282.9134
    Iteration 3:   deviance =  282.8157
    Iteration 4:   deviance =  282.8156
    Iteration 5:   deviance =  282.8156

    Generalized linear models                          No. of obs      =       340
    Optimization     : MQL Fisher scoring              Residual df     =       338
                       (IRLS EIM)                      Scale parameter =         1
    Deviance         =  282.8156218                    (1/df) Deviance =  .8367326
    Pearson          =  327.5643783                    (1/df) Pearson  =  .9691254

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             = -1687.368

------------------------------------------------------------------------------
             |                 EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0532907   .0067666     7.88   0.000     .0400283    .0665531
       _cons |  -3.620299   .3741324    -9.68   0.000    -4.353585   -2.887013
------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

991 .
```

```
992 .
993 . des illw2

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
illw2           double %8.0g                  Total number of illnesses
                                                experienced in time period
                                                1987-1996

994 . glm illw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -303.59609

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  .3512988
Deviance         =  118.7390083                    (1/df) Deviance =  .3512988
Pearson          =  118.7390083                    (1/df) Pearson  =  .3512988

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  1.797624
Log likelihood   = -303.5960853                    BIC             = -1851.445

------------------------------------------------------------------------------
             |                 OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .0085423   .0128556     0.66   0.506    -.0166543    .0337389
       _cons |   .2741359   .0344406     7.96   0.000     .2066336    .3416382
------------------------------------------------------------------------------

995 . glm HP2sxlife illw2 if gender==1, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  327.4086
Iteration 2:   deviance =  327.3702
Iteration 3:   deviance =  327.3699
Iteration 4:   deviance =  327.3699
Iteration 5:   deviance =  327.3699

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       338
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =    327.36992                    (1/df) Deviance =  .9685501
Pearson          =  335.9738293                    (1/df) Pearson  =  .9940054
```

```
Variance function: V(u) = u*(1-u)                 [Bernoulli]
Link function    : g(u) = invnorm(u)              [Probit]

                                                  BIC             = -1642.814

------------------------------------------------------------------------------
             |                 EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       illw2 |   .4754044   .1211711     3.92   0.000     .2379134    .7128953
       _cons |  -.9963884   .0886054   -11.25   0.000    -1.170052    -.822725
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

996 .
997 . des radhlw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
radhlw2         double %8.0g                  how much believed personal
                                                health is affected by
                                                radiation in 1996

998 . glm radhlw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1693.4076

Generalized linear models                         No. of obs      =        340
Optimization     : ML                             Residual df     =        338
                                                  Scale parameter =   1247.933
Deviance         =  421801.4584                   (1/df) Deviance =   1247.933
Pearson          =  421801.4584                   (1/df) Pearson  =   1247.933

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   9.972986
Log likelihood   = -1693.407647                   BIC             =   419831.3

------------------------------------------------------------------------------
             |                 OIM
     radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.220373    .766216     1.59   0.111    -.2813831    2.722128
       _cons |   45.63198   2.052711    22.23   0.000     41.60874    49.65522
------------------------------------------------------------------------------
```

```
999 . glm HP2sxlife radhlw2 if gender==1, fam(bin) irls scale(dev) link(probit)

    Iteration 1:   deviance =  299.0301
    Iteration 2:   deviance =  296.5897
    Iteration 3:   deviance =  296.5625
    Iteration 4:   deviance =  296.5625
    Iteration 5:   deviance =  296.5625

    Generalized linear models                          No. of obs      =        340
    Optimization     : MQL Fisher scoring              Residual df     =        338
                       (IRLS EIM)                      Scale parameter =          1
    Deviance         =  296.5625078                    (1/df) Deviance =   .8774039
    Pearson          =   336.752315                    (1/df) Pearson  =   .9963086

    Variance function: V(u) = u*(1-u)                  [Bernoulli]
    Link function    : g(u) = invnorm(u)               [Probit]

                                                       BIC             =  -1673.621

    ------------------------------------------------------------------------------
                 |                 EIM
       HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
         radhlw2 |   .0156386   .0022528     6.94   0.000     .0112232     .020054
           _cons |  -1.687381   .1543913   -10.93   0.000    -1.989983    -1.38478
    ------------------------------------------------------------------------------
    (Standard errors scaled using square root of deviance-based dispersion.)

1000 .
1001 .
1002 . des bf4

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
```

```
1003 . glm bf4  avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1027.1225

     Generalized linear models                          No. of obs      =        340
     Optimization     : ML                              Residual df     =        338
                                                        Scale parameter =    24.7771
     Deviance         =  8374.659221                    (1/df) Deviance =    24.7771
     Pearson          =  8374.659221                    (1/df) Pearson  =    24.7771

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   6.053662
     Log likelihood   = -1027.122509                    BIC             =   6404.476

     ------------------------------------------------------------------------------
                  |                 OIM
              bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |  -.0331637   .1079644    -0.31   0.759    -.2447701    .1784427
            _cons |   12.52896   .2892393    43.32   0.000     11.96206    13.09586
     ------------------------------------------------------------------------------

1004 . glm HP2sxlife bf4  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  265.0595
     Iteration 2:   deviance =  261.6959
     Iteration 3:   deviance =  261.6273
     Iteration 4:   deviance =  261.6271
     Iteration 5:   deviance =  261.6271

     Generalized linear models                          No. of obs      =        340
     Optimization     : MQL Fisher scoring              Residual df     =        338
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  261.6270836                    (1/df) Deviance =   .7740446
     Pearson          =  301.9171445                    (1/df) Pearson  =    .893246

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1708.557
```

HP2sxlife	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.1431725**	**.0149643**	**-9.57**	**0.000**	**-.172502**	**-.1138431**
_cons	**.7780696**	**.180124**	**4.32**	**0.000**	**.425033**	**1.131106**

(Standard errors scaled using square root of deviance-based dispersion.)

```
1005 .
1006 . des bf4m
```

variable name	storage type	display format	value label	variable label
bf4m	float	%9.0g		**bf4m = max(0, 32 - BSIsoma)**

```
1007 . glm bf4m  avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1060.7791

Generalized linear models                          No. of obs      =        340
Optimization     : ML                              Residual df     =        338
                                                   Scale parameter =   30.20174
Deviance         =  10208.18969                    (1/df) Deviance =   30.20174
Pearson          =  10208.18969                    (1/df) Pearson  =   30.20174

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   6.251642
Log likelihood   = -1060.779096                    BIC             =   8238.006
```

bf4m	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**-.0266037**	**.1191987**	**-0.22**	**0.823**	**-.2602289**	**.2070215**
_cons	**20.34324**	**.3193362**	**63.70**	**0.000**	**19.71735**	**20.96913**

```
1008 . glm HP2sxlife bf4m  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  266.1375
     Iteration 2:   deviance =  263.3205
     Iteration 3:   deviance =   263.273
     Iteration 4:   deviance =  263.2729
     Iteration 5:   deviance =  263.2729

     Generalized linear models                          No. of obs      =        340
     Optimization     : MQL Fisher scoring              Residual df     =        338
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  263.2728985                    (1/df) Deviance =   .7789139
     Pearson          =  303.0162706                    (1/df) Pearson  =   .8964978

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1706.911

     ------------------------------------------------------------------------------
                  |                 EIM
       HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
            bf4m |  -.1287243   .0140303    -9.17   0.000    -.1562231   -.1012255
           _cons |   1.624944    .276779     5.87   0.000     1.082468    2.167421
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1009 .
1010 . des shrelaw2

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     shrelaw2        double %8.0g                  Percentage of strains and
                                                     hassles related to
                                                     relationships in 1996
```

```
1011 . glm shrelaw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1686.1612

     Generalized linear models                         No. of obs      =        339
     Optimization     : ML                             Residual df     =        337
                                                       Scale parameter =   1231.384
     Deviance         =   414976.438                   (1/df) Deviance =   1231.384
     Pearson          =   414976.438                   (1/df) Pearson  =   1231.384

     Variance function: V(u) = 1                       [Gaussian]
     Link function    : g(u) = u                       [Identity]

                                                       AIC             =   9.959653
     Log likelihood   =  -1686.16125                   BIC             =   413013.1

     ------------------------------------------------------------------------------
                  |                 OIM
         shrelaw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   .6230115   .7612097     0.82   0.413     -.868932    2.114955
            _cons |   26.21356   2.042278    12.84   0.000     22.21077    30.21635
     ------------------------------------------------------------------------------

1012 . glm HP2sxlife shrelaw2  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =   340.048
     Iteration 2:   deviance =  339.8281
     Iteration 3:   deviance =   339.828
     Iteration 4:   deviance =   339.828

     Generalized linear models                         No. of obs      =        339
     Optimization     : MQL Fisher scoring             Residual df     =        337
                        (IRLS EIM)                     Scale parameter =          1
     Deviance         =  339.8280445                   (1/df) Deviance =   1.008392
     Pearson          =  339.1270644                   (1/df) Pearson  =   1.006312

     Variance function: V(u) = u*(1-u)                 [Bernoulli]
     Link function    : g(u) = invnorm(u)              [Probit]

                                                       BIC             =  -1623.534
```

```
-------------------------------------------------------------------------------
             |                 EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
    shrelaw2 |   .0035605   .0021514     1.65   0.098    -.0006562    .0077772
       _cons |  -.9307902   .1003805    -9.27   0.000    -1.127532    -.734048
-------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1013 .
1014 . des shfamw2

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
shfamw2         double %8.0g                  Percentage of strains and
                                                hassles related to family in
                                                1996

1015 . glm shfamw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1704.8947

Generalized linear models                          No. of obs      =       339
Optimization     : ML                              Residual df     =       337
                                                   Scale parameter =  1375.284
Deviance         =   463470.769                    (1/df) Deviance =  1375.284
Pearson          =   463470.769                    (1/df) Pearson  =  1375.284

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  10.07017
Log likelihood   = -1704.894657                    BIC             =  461507.4

-------------------------------------------------------------------------------
             |                 OIM
     shfamw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+-----------------------------------------------------------------
avgcumdosew2 |  -.7484378   .8043765    -0.93   0.352    -2.324987    .8281112
       _cons |   34.76184    2.15791    16.11   0.000     30.53241    38.99127
-------------------------------------------------------------------------------
```

```
1016 . glm HP2sxlife shfamw2  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  338.2157
     Iteration 2:   deviance =  338.0066
     Iteration 3:   deviance =  338.0065
     Iteration 4:   deviance =  338.0065

     Generalized linear models                          No. of obs      =       339
     Optimization     : MQL Fisher scoring              Residual df     =       337
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  338.0064771                    (1/df) Deviance =  1.002987
     Pearson          =  339.3157137                    (1/df) Pearson  =  1.006872

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1625.356

     ------------------------------------------------------------------------------
                  |                 EIM
       HP2sxlife  |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
         shfamw2  |   .0027669   .0020626     1.34   0.180    -.0012757    .0068096
           _cons  |  -.9380005   .1081399    -8.67   0.000    -1.149951   -.7260503
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1017 .
1018 . scalar sxlifeMedMw2 = "age"

1019 .
1020 . title4 "female impact models mediator search"
     ------------------------------------------------------------------------------
     female impact models mediator search
     ------------------------------------------------------------------------------

1021 .
```

```
1022 . * age is a mediating effect for females for Dose=> sex life for women
1023 . glm age avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1406.9403

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   136.9184
     Deviance         =  49427.52828                    (1/df) Deviance =   136.9184
     Pearson          =  49427.52828                    (1/df) Pearson  =   136.9184

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   7.762756
     Log likelihood   = -1406.940271                    BIC             =   47299.65

     ------------------------------------------------------------------------------
                  |                 OIM
              age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
            _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
     ------------------------------------------------------------------------------

1024 . glm HP2sxlife age  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  336.5251
     Iteration 2:   deviance =  333.7638
     Iteration 3:   deviance =  333.7326
     Iteration 4:   deviance =  333.7326
     Iteration 5:   deviance =  333.7326

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  333.7325644                    (1/df) Deviance =   .9244669
     Pearson          =  379.4384762                    (1/df) Pearson  =   1.051076

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1794.147
```

```
             |                EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0606116   .0071416     8.49   0.000     .0466144    .0746088
       _cons |  -3.838422   .3937027    -9.75   0.000    -4.610065   -3.066779
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1025 .
1026 . * illness is a mediating effect for females = > sex life for men
1027 . des illw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
illw2           double %8.0g                  Total number of illnesses
                                                experienced in time period
                                                1987-1996

1028 . glm illw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -463.51524

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =   .756881
Deviance         =  273.2340487                    (1/df) Deviance =   .756881
Pearson          =  273.2340487                    (1/df) Pearson  =   .756881

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  2.564822
Log likelihood   = -463.5152411                    BIC             = -1854.645

------------------------------------------------------------------------------
             |                OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .1249912   .0331157     3.77   0.000     .0600856    .1898968
       _cons |    .301285   .0544484     5.53   0.000      .194568    .4080019
------------------------------------------------------------------------------
```

```
1029 . glm HP2sxlife illw2 if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  388.6886
     Iteration 2:   deviance =  388.2329
     Iteration 3:   deviance =  388.2328
     Iteration 4:   deviance =  388.2328

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  388.2327887                    (1/df) Deviance =   1.075437
     Pearson          =  359.7775997                    (1/df) Pearson  =   .9966138

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1739.647

     ------------------------------------------------------------------------------
                  |                 EIM
       HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
            illw2 |   .4442672   .0949037     4.68   0.000     .2582594     .630275
            _cons |  -.8535276   .0872416    -9.78   0.000    -1.024518   -.6825372
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1030 .
1031 . *----------  this may be important -----------------------------------------
     > --
1032 . * radhlw2 can be a mediating factor for females in wave 2 for sxlife
1033 . des radhlw2

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     radhlw2         double %8.0g                  how much believed personal
                                                     health is affected by
                                                     radiation in 1996
```

```
1034 . glm radhlw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1791.2233

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   1137.567
     Deviance         =  410661.5604                    (1/df) Deviance =   1137.567
     Pearson          =  410661.5604                    (1/df) Pearson  =   1137.567

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   9.880018
     Log likelihood   = -1791.223306                    BIC             =   408533.7

     ------------------------------------------------------------------------------
                  |                 OIM
          radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   3.302288   1.283833     2.57   0.010     .7860214    5.818555
            _cons |   56.95167   2.110863    26.98   0.000     52.81445    61.08888
     ------------------------------------------------------------------------------

1035 . glm HP2sxlife radhlw2 if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  390.2214
     Iteration 2:   deviance =  389.9357
     Iteration 3:   deviance =  389.9356
     Iteration 4:   deviance =  389.9356

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  389.9355535                    (1/df) Deviance =   1.080154
     Pearson          =  370.7850434                    (1/df) Pearson  =   1.027105

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1737.944
```

HP2sxlife	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
radhlw2	**.0108547**	**.0023275**	**4.66**	**0.000**	**.0062929**	**.0154166**
_cons	**-1.340315**	**.1718732**	**-7.80**	**0.000**	**-1.67718**	**-1.003449**

(Standard errors scaled using square root of deviance-based dispersion.)

```
1036 . *-----------------------------------------------------------------------
     > --
1037 .
1038 . des bf4   // soma recentered
```

variable name	storage type	display format	value label	variable label
bf4	float	%9.0g		**bf4 = max(0, 24 - BSIsoma)**

```
1039 . * bf4 is a mediting effect for females for Dose=>  sex life for women
1040 . glm bf4  avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1109.0983

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   26.53281
     Deviance         =  9578.344971                    (1/df) Deviance =   26.53281
     Pearson          =  9578.344971                    (1/df) Pearson  =   26.53281

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   6.121754
     Log likelihood   = -1109.098281                    BIC             =   7450.466
```

bf4	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**-.595012**	**.1960703**	**-3.03**	**0.002**	**-.9793027**	**-.2107212**
_cons	**11.02048**	**.3223763**	**34.19**	**0.000**	**10.38863**	**11.65232**

```
1041 . glm HP2sxlife bf4  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  344.0399
     Iteration 2:   deviance =  342.6827
     Iteration 3:   deviance =  342.6686
     Iteration 4:   deviance =  342.6686
     Iteration 5:   deviance =  342.6686

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  342.6686152                    (1/df) Deviance =   .9492205
     Pearson          =  336.3540555                    (1/df) Pearson  =   .9317287

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1785.211

     ------------------------------------------------------------------------------
                  |                 EIM
       HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
              bf4 |  -.1230087   .0148291    -8.30   0.000    -.1520732   -.0939442
            _cons |   .5134392   .1542351     3.33   0.001      .211144    .8157344
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1042 .
1043 . des bf4m // soma recentered

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)

1044 . * bf4m is a possible mediating effect for female sex life
```

```
1045 . glm bf4m  avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1140.8259

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   31.60104
     Deviance         =  11407.97484                    (1/df) Deviance =   31.60104
     Pearson          =  11407.97484                    (1/df) Pearson  =   31.60104

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   6.296561
     Log likelihood   = -1140.825904                    BIC             =   9280.095

     ------------------------------------------------------------------------------
                  |                 OIM
             bf4m |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   -.599311   .2139789    -2.80   0.005    -1.018702   -.1799202
            _cons |   18.83424   .3518214    53.53   0.000     18.14469     19.5238
     ------------------------------------------------------------------------------

1046 . glm HP2sxlife bf4m  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  356.1451
     Iteration 2:   deviance =  355.6209
     Iteration 3:   deviance =  355.6178
     Iteration 4:   deviance =  355.6178
     Iteration 5:   deviance =  355.6178

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  355.6178202                    (1/df) Deviance =   .9850909
     Pearson          =  340.0032816                    (1/df) Pearson  =   .9418373

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1772.262
```

```
------------------------------------------------------------------------------
             |                 EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        bf4m |  -.0990193   .0135516    -7.31   0.000     -.12558   -.0724586
       _cons |   1.063679    .244399     4.35   0.000     .584666    1.542693
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1047 .
1048 . des shfamw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
shfamw2         double %8.0g                  Percentage of strains and
                                                hassles related to family in
                                                1996

1049 . glm shfamw2  avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1804.1821

Generalized linear models                          No. of obs      =       362
Optimization     : ML                              Residual df     =       360
                                                   Scale parameter =   1255.79
Deviance         =  452084.3956                    (1/df) Deviance =   1255.79
Pearson          =  452084.3956                    (1/df) Pearson  =   1255.79

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  9.978907
Log likelihood   = -1804.182119                    BIC             =  449963.4

------------------------------------------------------------------------------
             |                 OIM
     shfamw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .6648412   1.349346     0.49   0.622    -1.979828     3.30951
       _cons |    33.6876   2.218839    15.18   0.000     29.33876    38.03645
------------------------------------------------------------------------------
```

1050 . glm HP2sxlife shfamw2 if gender==2, fam(bin) irls scale(dev) link(probit)

```
Iteration 1:   deviance =  411.7925
Iteration 2:   deviance =  411.1829
Iteration 3:   deviance =  411.1826
Iteration 4:   deviance =  411.1826

Generalized linear models                          No. of obs      =       362
Optimization     : MQL Fisher scoring              Residual df     =       360
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  411.1826472                    (1/df) Deviance =  1.142174
Pearson          =  361.8999919                    (1/df) Pearson  =  1.005278

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1709.809
```

HP2sxlife	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
shfamw2	-.0023803	.0021918	-1.09	0.277	-.0066761	.0019156
_cons	-.5736929	.1047839	-5.48	0.000	-.7790656	-.3683202

(Standard errors scaled using square root of deviance-based dispersion.)

1051 .

1052 . des shrelaw2

variable name	storage type	display format	value label	variable label
shrelaw2	double	%8.0g		**Percentage of strains and hassles related to relationships in 1996**

```
1053 . glm shrelaw2  avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1767.2727

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   996.9369
     Deviance         =   359894.211                    (1/df) Deviance =   996.9369
     Pearson          =   359894.211                    (1/df) Pearson  =   996.9369

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   9.748059
     Log likelihood   = -1767.272695                    BIC             =   357766.3

     ------------------------------------------------------------------------------
                  |                 OIM
         shrelaw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   1.945314    1.20186     1.62   0.106    -.4102891    4.300917
            _cons |   22.64351   1.976084    11.46   0.000     18.77046    26.51657
     ------------------------------------------------------------------------------

1054 . glm HP2sxlife shrelaw2 if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  415.0412
     Iteration 2:   deviance =   414.406
     Iteration 3:   deviance =  414.4058
     Iteration 4:   deviance =  414.4058

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  414.4057989                    (1/df) Deviance =   1.147939
     Pearson          =  362.9721983                    (1/df) Pearson  =   1.005463

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1713.474
```

```
------------------------------------------------------------------------------
             |                 EIM
   HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    shrelaw2 |  -.0020918   .0024591    -0.85   0.395    -.0069114    .0027279
       _cons |  -.5970179   .0953785    -6.26   0.000    -.7839564   -.4100794
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1055 .
1056 . glm aborw2 avgcumdosew2 if gender==2, fam(pois) link(log)

Iteration 0:   log likelihood = -293.85682
Iteration 1:   log likelihood = -282.01816
Iteration 2:   log likelihood =  -281.9464
Iteration 3:   log likelihood = -281.94638

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =         1
Deviance         =  391.5624729                    (1/df) Deviance =  1.084661
Pearson          =  595.1604651                    (1/df) Pearson  =  1.648644

Variance function: V(u) = u                        [Poisson]
Link function    : g(u) = ln(u)                    [Log]

                                                   AIC             =  1.564443
Log likelihood   = -281.9463797                    BIC             = -1736.317

------------------------------------------------------------------------------
             |                 OIM
      aborw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |  -.0526825   .0821516    -0.64   0.521    -.2136968    .1083317
       _cons |  -1.095949   .1143769    -9.58   0.000    -1.320124   -.8717744
------------------------------------------------------------------------------
```

```
1057 . glm HP2sxlife aborw2 if gender==2, fam(bin) link(probit) irls scale(dev)

     Iteration 1:   deviance =  412.7431
     Iteration 2:   deviance =  412.0513
     Iteration 3:   deviance =  412.0507
     Iteration 4:   deviance =  412.0507

     Generalized linear models                          No. of obs      =       363
     Optimization     : MQL Fisher scoring              Residual df     =       361
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  412.0507362                    (1/df) Deviance =  1.141415
     Pearson          =  361.2552584                    (1/df) Pearson  =  1.000707

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1715.829

     ------------------------------------------------------------------------------
                  |                 EIM
        HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
           aborw2 |  -.1967113   .1199217    -1.64   0.101    -.4317535    .0383309
            _cons |  -.5909716   .0824147    -7.17   0.000    -.7525014   -.4294418
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1058 .
1059 . title4 "h1 pt2 wave 2 sex life impact summary matrix construction"
     ------------------------------------------------------------------------------
     h1 pt2 wave 2 sex life impact summary matrix construction
     ------------------------------------------------------------------------------

1060 .
1061 . *xx summary of mediating effects:  age and illness mediate sex life for men
1062 . *                                  age illnesss radhlw2 bf4 bf4m (soma) medi
     > ate sex life for women
```

```
1063 .
1064 . scalar sxlifeMedMw2 = "age illw2"

1065 . scalar sxlifeMedFw2 = "age illw2 radhlw2 bf4 bf4m"

1066 . *--- summary matrix contstruction
1067 .
1068 .   matrix define  sxlifeMw2 = J(1,8, 0)

1069 .         matrix define  sxlifeFw2 = J(1,8, 0)

1070 . matrix colnames  sxlifeMw2=  hypnum ptnum wave gender medsig numMAsig numMod
     > sig numMed

1071 .         matrix colnames  sxlifeFw2=  hypnum ptnum wave gender medsig numMAsi
     > g numModsig numMed

1072 .     matrix define  sxlifeMw2= (1, 2, 3, 1, 0, 6, 0, 1 )

1073 .         matrix define  sxlifeFw2= (1, 2, 3, 2, 0, 4, 0, 5)

1074 .         matrix rowname  sxlifeMw2 =  sxlifeMw2

1075 .         matrix rowname  sxlifeFw2 =  sxlifeFw2

1076 .         matlist  sxlifeMw2

             |         c1          c2          c3          c4          c5          c
     > 6          c7          c8
-------------+----------------------------------------------------------------------
     > --------------------------
   sxlifeMw2 |          1           2           3           1           0
     > 6           0           1

1077 .         matlist  sxlifeFw2

             |         c1          c2          c3          c4          c5          c
     > 6          c7          c8
-------------+----------------------------------------------------------------------
     > --------------------------
   sxlifeFw2 |          1           2           3           2           0
     > 4           0           5
```

```
1078 .         matrix define H1pt2w2 = (  wkMw2 \  wkFw2 \  hmcrMw2 \  hmcrFw2 \ sp
     > Mw2 \ spFw2 \ prbfamMw2 \  prbfamFw2 \  sxlifeMw2 \  sxlifeFw2 )

1079 .
1080 .         matlist H1pt2w2

                 |        c1          c2          c3          c4          c5          c
     > 6         c7          c8
     ------------+-----------------------------------------------------------------------
     > ------------------------
              r1 |         1           2           2           1           0
     > 2          0           2
              r1 |         1           2           2           2           0
     > 1          0           2
              r1 |         1           2           3           1           0
     > 1          0           1
              r1 |         1           2           3           2           1
     > 1          0           2
           spMw2 |         1           2           3           1           0
     > 4          0           1
           spFw2 |         1           2           3           2           1
     > 5          0           3
       prbfamMw2 |         1           2           3           1           0
     > 3          0           1
       prbfamFw2 |         1           2           3           2           0
     > 3          0           2
       sxlifeMw2 |         1           2           3           1           0
     > 6          0           1
       sxlifeFw2 |         1           2           3           2           0
     > 4          0           5

1081 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
     > odsig numMed

1082 .     matrix rownames H1pt2w2 =  wkMw2  wkFw2  hmcrMw2  hmcrFw2  spMw2 spFw2 p
     > rbfhmMw2  prbfhmFw2
```

```
1083 .     matlist H1pt2w2

              │    hypnum      ptnum       wave     gender     medsig   numMAsi
> g  numModsig     numMed
──────────────┼──────────────────────────────────────────────────────────────
> ────────────────────────
         wkMw2 │         1          2          2          1          0
> 2          0          2
         wkFw2 │         1          2          2          2          0
> 1          0          2
       hmcrMw2 │         1          2          3          1          0
> 1          0          1
       hmcrFw2 │         1          2          3          2          1
> 1          0          2
         spMw2 │         1          2          3          1          0
> 4          0          1
         spFw2 │         1          2          3          2          1
> 5          0          3
     prbfhmMw2 │         1          2          3          1          0
> 3          0          1
     prbfhmFw2 │         1          2          3          2          0
> 3          0          2
     prbfhmFw2 │         1          2          3          1          0
> 6          0          1
     prbfhmFw2 │         1          2          3          2          0
> 4          0          5

1084 .
1085 .
1086 .
1087 .
1088 . *=================== Chunk 8    Dose => interests and Hobbies relationship
1089 .
1090 . title " 6. H1 Wave 2 part2  Dose-Interest and Hobbies impact"


******************************************************************************
> *
******************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****       6. H1 Wave 2 part2  Dose-Interest and Hobbies impact         ****
> *
*****                                                                    ****
> *
*****                                                                    ****
```

```
> *
*****                                          17 Jun 2012    10:09:32  ****
> *
****************************************************************************
> *
****************************************************************************
> *



1091 .
1092 .
1093 . * Chunk 8 ---male models
1094 . forvalues j = 2/2 {
       2. set more off
       3.
1095 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
     >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
       4.
1096 .   foreach var in HP2inthob  {
       5.       forvalues k=1/2 {
       6. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
       7.
1097 . di as input "Full main model for `var' for wave= `j' "
       8. di _skip(4)
       9. di as input  "chunk 8 H1 test:Gender= `k'  model Wave =  `j' for `e(depva
     > r)' "
      10. di _skip(4)
      11. title "Full Nottingham Part 2 subscale models for male and then females"
      12. di as input "Model for gender==`k' and wave == `j'"
      13. di _skip(2)
      14.       xi: logistic `var' age i.educ occ1w`j'-occ8w`j' ///
     >                 marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' /
     > //
     >                 radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
     >                  deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
     >                 illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' su
     > chrw`j' ///
     >                  havmilsq radhlw2 if gender==`k', coef  difficult iterate(50
     > )
      15.                         estat class
      16.                         estat gof
      17.                         fitstat
      18. }
      19. }
      20. }
```

```
              storage  display     value
variable name   type   format      label      variable label
--------------------------------------------------------------------------------
age             double %8.0g                * Respondent's age
educ1           byte   %8.0g                  educ==1. did not graduate high
                                                school
educ2           byte   %8.0g                  educ==2. graduated high school
educ3           byte   %8.0g                  educ==3. technical degree
educ4           byte   %8.0g                  educ==4. did not finish
                                                college/bachelor's
educ5           byte   %8.0g                  educ==5. graduated
                                                college/bachelor's
educ6           byte   %8.0g                  educ==6. finished
                                                specialist/master's degree
educ7           byte   %8.0g                  educ==7. doctor of science/phd
marrw21         byte   %8.0g                  marrw2==1. single
marrw22         byte   %8.0g                  marrw2==2. cohabitating
marrw23         byte   %8.0g                  marrw2==3. married
marrw24         byte   %8.0g                  marrw2==4. separated
marrw25         byte   %8.0g                  marrw2==5. divorced
marrw26         byte   %8.0g                  marrw2==6. widowed
inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                basic neccessities in 1996
inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                basic neccessities in 1996
inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                plus extra purchases/savings
                                                in 1996
inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                afford luxury items in 1996
bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
bf9             float  %9.0g                  bf9= max(0, 30 - shhlw1)
bf11            float  %9.0g                  bf11= max(0, 20 - sufamw1)
bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
bf15m           float  %9.0g                  bf15m= max(0, 1 - icdxcnt) * bf2
bf30            float  %9.0g                  bf30 = max(0, neiw1 - 85) * bf20
bf40            float  %9.0g                  bf40 = max(0, icdxcnt -
                                                1.01635E-007)
Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= 1  model Wave =  2 for HP2sxlife
```

```
******************************************************************************
> *
******************************************************************************
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****  Full Nottingham Part 2 subscale models for male and then females   ****
> *
*****                                                                    ****
> *
*****                                                                    ****
> *
*****                                          17 Jun 2012    10:09:32  ****
> *
******************************************************************************
> *
******************************************************************************
> *


Model for gender==1 and wave == 2

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw25 != 0 predicts failure perfectly
      marrw25 dropped and 4 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used
```

```
note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 9 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 3 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 1 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity

Logistic regression                               Number of obs   =        240
                                                  LR chi2(35)     =      92.50
                                                  Prob > chi2     =     0.0000
Log likelihood = -55.199011                       Pseudo R2       =     0.4559
```

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0625698	.0339541	1.84	0.065	-.0039791	.1291186
_Ieduc_2	-1.043358	1.579537	-0.66	0.509	-4.139194	2.052478
_Ieduc_3	-1.383026	.8161024	-1.69	0.090	-2.982558	.216505
_Ieduc_4	0	(omitted)				
_Ieduc_5	-.3882601	.890757	-0.44	0.663	-2.134112	1.357591
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	-1.033982	5.222537	-0.20	0.843	-11.26997	9.202003
occ2w2	-2.764859	5.282979	-0.52	0.601	-13.11931	7.58959
occ3w2	-1.159373	5.266774	-0.22	0.826	-11.48206	9.163314
occ4w2	-1.475817	5.272908	-0.28	0.780	-11.81053	8.858893
occ5w2	.6777917	5.260041	0.13	0.897	-9.631698	10.98728
occ6w2	0	(omitted)				
occ7w2	-.3442089	5.327123	-0.06	0.948	-10.78518	10.09676
occ8w2	0	(omitted)				
marrw21	13.93224	1621.282	0.01	0.993	-3163.721	3191.586
marrw22	0	(omitted)				
marrw23	11.47436	1621.282	0.01	0.994	-3166.179	3189.128
marrw25	0	(omitted)				
marrw26	0	(omitted)				
inc1w2	-2.09725	5.429773	-0.39	0.699	-12.73941	8.544909
inc2w2	-.9256519	5.257192	-0.18	0.860	-11.22956	9.378255
inc3w2	.0745765	5.245026	0.01	0.989	-10.20548	10.35464
inc4w2	0	(omitted)				
radhlw2	.0364231	.0131057	2.78	0.005	.0107363	.0621099
havmil	.0020332	.0091412	0.22	0.824	-.0158833	.0199497
avgcumdosew2	-.2023055	.3376483	-0.60	0.549	-.8640841	.4594731

bf1	.0108557	.0182727	0.59	0.552	-.0249582	.0466696
bf4	-.290932	.0816796	-3.56	0.000	-.4510211	-.1308428
bf6	.0111353	.0131635	0.85	0.398	-.0146647	.0369353
bf7	.0337038	.1171208	0.29	0.774	-.1958487	.2632562
bf14	-.000219	.0001127	-1.94	0.052	-.0004398	1.92e-06
bf15	0	(omitted)				
bf40	.490857	.2032201	2.42	0.016	.0925529	.889161
deaw2	.006222	.5178905	0.01	0.990	-1.008825	1.021269
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	1.036869	.5663339	1.83	0.067	-.0731249	2.146863
movew2	.7948452	.8450104	0.94	0.347	-.8613447	2.451035
illw2	-.8262786	.5178561	-1.60	0.111	-1.841258	.1887007
shfamw2	-.003778	.0101348	-0.37	0.709	-.0236419	.0160858
shhlw2	-.0014472	.0125099	-0.12	0.908	-.0259662	.0230717
shjobw2	.0044446	.012101	0.37	0.713	-.0192728	.0281621
shrelaw2	-.0158848	.0098629	-1.61	0.107	-.0352157	.0034461
suprtw2	-.0048211	.0089741	-0.54	0.591	-.0224099	.0127678
suchrw2	.016543	.008867	1.87	0.062	-.0008361	.033922
havmilsq	-2.84e-06	.0000159	-0.18	0.858	-.000034	.0000283
radhlw2	0	(omitted)				
_cons	-16.47971	1621.283	-0.01	0.992	-3194.136	3161.177

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	20	6	26
-	16	198	214
Total	36	204	240

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	55.56%
Specificity	Pr(-|~D)	97.06%
Positive predictive value	Pr(D| +)	76.92%
Negative predictive value	Pr(~D| -)	92.52%
False + rate for true ~D	Pr(+|~D)	2.94%
False - rate for true D	Pr(-| D)	44.44%
False + rate for classified +	Pr(~D| +)	23.08%
False - rate for classified -	Pr(D| -)	7.48%
Correctly classified		90.83%

```
Logistic model for HP2inthob, goodness-of-fit test

       number of observations =       240
 number of covariate patterns =       240
           Pearson chi2(204) =       545.84
                 Prob > chi2 =         0.0000

Measures of Fit for logistic of HP2inthob

Log-Lik Intercept Only:     -101.450    Log-Lik Full Model:          -55.199
D(190):                      110.398    LR(35):                       92.502
                                        Prob > LR:                     0.000
McFadden's R2:                 0.456    McFadden's Adj R2:            -0.037
Maximum Likelihood R2:         0.320    Cragg & Uhler's R2:            0.561
McKelvey and Zavoina's R2:     0.776    Efron's R2:                    0.482
Variance of y*:               14.694    Variance of error:             3.290
Count R2:                      0.908    Adj Count R2:                  0.389
AIC:                           0.877    AIC*n:                       210.398
BIC:                        -930.923    BIC':                         99.320
Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= 2  model Wave =  2 for HP2inthob


******************************************************************************
> *
******************************************************************************
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****  Full Nottingham Part 2 subscale models for male and then females   ****
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****                                       17 Jun 2012    10:09:34  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

```
Model for gender==2 and wave == 2

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 8 obs not used

note: _Ieduc_8 omitted because of collinearity
note: marrw26 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity

Logistic regression                               Number of obs   =        354
                                                  LR chi2(44)     =     115.47
                                                  Prob > chi2     =     0.0000
Log likelihood = -111.06431                       Pseudo R2       =     0.3420
```

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.079863	.021131	3.78	0.000	.0384469	.121279
_Ieduc_2	-12.93831	1490.754	-0.01	0.993	-2934.762	2908.885
_Ieduc_3	-12.4076	1490.754	-0.01	0.993	-2934.231	2909.416
_Ieduc_4	-11.72169	1490.754	-0.01	0.994	-2933.546	2910.102
_Ieduc_5	-12.09518	1490.754	-0.01	0.994	-2933.919	2909.728
_Ieduc_6	-12.44516	1490.754	-0.01	0.993	-2934.269	2909.378
_Ieduc_7	-12.06531	1490.757	-0.01	0.994	-2933.895	2909.764
_Ieduc_8	0	(omitted)				
occ1w2	-1.681778	1.842381	-0.91	0.361	-5.292779	1.929222
occ2w2	-2.066763	1.905083	-1.08	0.278	-5.800657	1.66713
occ3w2	-.925484	1.867622	-0.50	0.620	-4.585956	2.734988
occ4w2	-1.837685	1.997812	-0.92	0.358	-5.753324	2.077954
occ5w2	-1.808015	2.160492	-0.84	0.403	-6.042501	2.426471
occ6w2	-.7980572	2.0458	-0.39	0.696	-4.807751	3.211637
occ7w2	-.6513668	1.8133	-0.36	0.719	-4.205369	2.902636
occ8w2	-.7497523	2.02704	-0.37	0.711	-4.722678	3.223174
marrw21	1.330155	1.130799	1.18	0.239	-.8861701	3.546479
marrw22	.1433998	1.421047	0.10	0.920	-2.641801	2.9286
marrw23	.3124211	.8029396	0.39	0.697	-1.261312	1.886154
marrw25	.2321157	1.213839	0.19	0.848	-2.146964	2.611196
marrw26	0	(omitted)				
inc1w2	1.002608	1.857433	0.54	0.589	-2.637893	4.643109
inc2w2	1.21648	1.809887	0.67	0.502	-2.330833	4.763793
inc3w2	.8716928	1.845137	0.47	0.637	-2.744709	4.488095
inc4w2	2.25991	2.119136	1.07	0.286	-1.893519	6.41334
radhlw2	.0169047	.0075432	2.24	0.025	.0021202	.0316892
havmil	.0026206	.00401	0.65	0.513	-.0052388	.0104801
avgcumdosew2	.1098391	.1075167	1.02	0.307	-.1008897	.3205679
bf1	-.0101735	.0098443	-1.03	0.301	-.029468	.0091209

bf4	-.160166	.0433489	-3.69	0.000	-.2451282	-.0752038
bf6	-.0029228	.0086097	-0.34	0.734	-.0197974	.0139519
bf7	-.0201783	.0882604	-0.23	0.819	-.1931656	.152809
bf14	-.0000789	.0000837	-0.94	0.346	-.000243	.0000853
bf15	0	(omitted)				
bf40	-.0387073	.0922777	-0.42	0.675	-.2195682	.1421537
deaw2	.1202612	.2113024	0.57	0.569	-.2938838	.5344063
dvcew2	.0143372	1.477099	0.01	0.992	-2.880724	2.909399
sepaw2	0	(omitted)				
accdw2	.4772298	.6036102	0.79	0.429	-.7058243	1.660284
movew2	-.5141092	.7928535	-0.65	0.517	-2.068073	1.039855
illw2	.1586699	.2249295	0.71	0.481	-.2821838	.5995235
shfamw2	-.0005225	.0071722	-0.07	0.942	-.0145799	.0135348
shhlw2	.0069143	.0072142	0.96	0.338	-.0072252	.0210539
shjobw2	-.0096031	.0066833	-1.44	0.151	-.0227021	.003496
shrelaw2	-.011349	.0077316	-1.47	0.142	-.0265027	.0038047
suprtw2	-.01257	.0057932	-2.17	0.030	-.0239246	-.0012155
suchrw2	.000171	.0063873	0.03	0.979	-.0123478	.0126898
havmilsq	-2.75e-06	5.84e-06	-0.47	0.638	-.0000142	8.69e-06
radhlw2	0	(omitted)				
_cons	8.21905	1490.755	0.01	0.996	-2913.607	2930.045

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	35	12	47
-	30	277	307
Total	65	289	354

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	53.85%
Specificity	Pr(-|~D)	95.85%
Positive predictive value	Pr(D| +)	74.47%
Negative predictive value	Pr(~D| -)	90.23%
False + rate for true ~D	Pr(+|~D)	4.15%
False - rate for true D	Pr(-| D)	46.15%
False + rate for classified +	Pr(~D| +)	25.53%
False - rate for classified -	Pr(D| -)	9.77%
Correctly classified		88.14%

```
Logistic model for HP2inthob, goodness-of-fit test
__________________________________________________

       number of observations =       354
 number of covariate patterns =       354
             Pearson chi2(309) =       384.69
                   Prob > chi2 =         0.0022

Measures of Fit for logistic of HP2inthob

Log-Lik Intercept Only:     -168.799    Log-Lik Full Model:          -111.064
D(304):                      222.129    LR(44):                       115.469
                                        Prob > LR:                      0.000
McFadden's R2:                 0.342    McFadden's Adj R2:              0.046
Maximum Likelihood R2:         0.278    Cragg & Uhler's R2:             0.453
McKelvey and Zavoina's R2:     0.619    Efron's R2:                     0.372
Variance of y*:                8.629    Variance of error:              3.290
Count R2:                      0.881    Adj Count R2:                   0.354
AIC:                           0.910    AIC*n:                        322.129
BIC:                       -1562.138    BIC':                         142.780

1098 .
1099 .  label var radhlw2 "Self-perceived Chornobyl health threat in Wave 2"

1100 .
1101 . title4 "7. Testing H1 Wv2 Moderators of male Dose => Interests and Hobbies I
     > mpact"
     ____________________________________________________________________________
     7. Testing H1 Wv2 Moderators of male Dose => Interests and Hobbies Impact
     ____________________________________________________________________________

1102 .
1103 .
1104 . forvalues j = 2/2 {
       2. set more off
       3.
```

```
1105 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
     >   bf4 bf14  bf40
       4.
1106 . foreach var in HP2inthob  {
       5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
       6. di _skip(2)
       7.  di as input "Full main model for `var' for wave= `j' "
       8. di _skip(4)
       9. di as input  "chunk 8 H1 test:Gender= male  model Wave =  `j' for `e(depv
     > ar)' "
      10. di _skip(4)
      11. title "Full Nottingham Part 2 subscale models " "males on  wave=`j'"
      12.     des bf5m shfamw2 radhlw2 bf4m
      13.       xi: logistic `var' age radhlw2 bf4 bf14 bf40   ///
     >                  suchrw2 if gender==1, coef  difficult iterate(50)
      14.                         estat class
      15.                         estat gof
      16.                         fitstat
      17. di _skip(2)
      18. di as input "Note: bf4m is necssary for bf5 but if bf4m is in model bf5 i
     > s not signif."
      19. di as input " Therefore, bf5 is not deemed significant."
      20. }
      21. }

                    storage  display     value
     variable name    type   format      label      variable label
     ------------------------------------------------------------------------------
     age             double %8.0g                 * Respondent's age
     educ1           byte   %8.0g                   educ==1. did not graduate high
                                                      school
     educ2           byte   %8.0g                   educ==2. graduated high school
     educ3           byte   %8.0g                   educ==3. technical degree
     educ4           byte   %8.0g                   educ==4. did not finish
                                                      college/bachelor's
     educ5           byte   %8.0g                   educ==5. graduated
                                                      college/bachelor's
     educ6           byte   %8.0g                   educ==6. finished
                                                      specialist/master's degree
     educ7           byte   %8.0g                   educ==7. doctor of science/phd
     marrw21         byte   %8.0g                   marrw2==1. single
     marrw22         byte   %8.0g                   marrw2==2. cohabitating
     marrw23         byte   %8.0g                   marrw2==3. married
     marrw24         byte   %8.0g                   marrw2==4. separated
     marrw25         byte   %8.0g                   marrw2==5. divorced
     marrw26         byte   %8.0g                   marrw2==6. widowed
     inc1w2          double %15.0g      LABJ        Income is not sufficient for
                                                      basic neccessities in 1996
     inc2w2          double %15.0g      LABJ        Income is just sufficient for
```

```
                                                basic neccessities in 1996
inc3w2          double %15.0g      LABJ        Income is sufficient for basics
                                                plus extra purchases/savings
                                                in 1996
inc4w2          double %15.0g      LABJ        Income allows to comfortably
                                                afford luxury items in 1996
bf4             float  %9.0g                   bf4 = max(0, 24 - BSIsoma)
bf14            float  %9.0g                   bf14= max(0, radw2 - 10) * bf12
bf40            float  %9.0g                   bf40 = max(0, icdxcnt -
                                                1.01635E-007)

Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= male  model Wave =  2 for HP2inthob



******************************************************************************
> *
******************************************************************************
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****              Full Nottingham Part 2 subscale models                 ****
> *
*****                          males on  wave=2                           ****
> *
*****                                                                     ****
> *
*****                                                                     ****
> *
*****                                        17 Jun 2012    10:09:36  ****
> *
******************************************************************************
> *
******************************************************************************
> *
```

variable name	storage type	display format	value label	variable label
bf5m	float	%9.0g		**bf5m = max(0, ecprw3 - 75) * bf4m**
shfamw2	double	%8.0g		**Percentage of strains and hassles related to family in 1996**
radhlw2	double	%8.0g		**Self-perceived Chornobyl health threat in Wave 2**
bf4m	float	%9.0g		**bf4m = max(0, 32 - BSIsoma)**

```
Logistic regression                             Number of obs   =        333
                                                LR chi2(6)      =      69.19
                                                Prob > chi2     =     0.0000
Log likelihood = -79.471154                     Pseudo R2       =     0.3033
```

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0216224	.0191393	1.13	0.259	-.01589	.0591348
radhlw2	.0280361	.0079783	3.51	0.000	.0123989	.0436732
bf4	-.1650158	.0473875	-3.48	0.000	-.2578935	-.072138
bf14	-.0001542	.0000727	-2.12	0.034	-.0002966	-.0000117
bf40	.2112248	.1220887	1.73	0.084	-.0280647	.4505143
suchrw2	.0048181	.0050234	0.96	0.337	-.0050276	.0146638
_cons	-3.881167	1.400675	-2.77	0.006	-6.626439	-1.135896

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	12	6	18
-	24	291	315
Total	36	297	333

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	**33.33%**
Specificity	Pr(-|~D)	**97.98%**
Positive predictive value	Pr(D| +)	**66.67%**
Negative predictive value	Pr(~D| -)	**92.38%**
False + rate for true ~D	Pr(+|~D)	**2.02%**
False - rate for true D	Pr(-| D)	**66.67%**
False + rate for classified +	Pr(~D| +)	**33.33%**
False - rate for classified -	Pr(D| -)	**7.62%**
Correctly classified		**90.99%**

Logistic model for HP2inthob, goodness-of-fit test

number of observations =	**333**
number of covariate patterns =	**330**
Pearson chi2(**323**) =	**279.79**
Prob > chi2 =	**0.9605**

Measures of Fit for **logistic** of **HP2inthob**

Log-Lik Intercept Only:	**-114.066**	Log-Lik Full Model:	**-79.471**
D(326):	**158.942**	LR(6):	**69.190**
		Prob > LR:	**0.000**
McFadden's R2:	**0.303**	McFadden's Adj R2:	**0.242**
Maximum Likelihood R2:	**0.188**	Cragg & Uhler's R2:	**0.378**
McKelvey and Zavoina's R2:	**0.477**	Efron's R2:	**0.266**
Variance of y*:	**6.288**	Variance of error:	**3.290**
Count R2:	**0.910**	Adj Count R2:	**0.167**
AIC:	**0.519**	AIC*n:	**172.942**
BIC:	**-1734.512**	BIC':	**-34.341**

Note: bf4m is necssary for bf5 but if bf4m is in model bf5 is not signif.
Therefore, bf5 is not deemed significant.

```
1107 .
1108 . cap gen bf4Xd2 = bf4*avgcumdosew2

1109 . cap gen bf40Xd2 = bf40*agecumdosew2

1110 .
1111 . scalar SigdoseMEinthob = "no"

1112 . scalar MainEffMw2 = "radhlw2 bf4 bf40"

1113 .
1114 . title3 "Wave 2 Main effects Dose=> Interests and Hobbies impact identificati
     > on"
     -------------------------------------------------------------------------------
     title3 : Wave 2 Main effects Dose=> Interests and Hobbies impact identificatio
     > n
     17 Jun 2012
     10:09:37
     computer  Macintosh (Intel 64-bit)
     folder  /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests
     > /h1pt2
     Data file  chwide16june2012.dta  currrently has  2384  variables and  703  obs
     > ervations

1115 . forvalues j = 2/2 {
       2. set more off
       3.
1116 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
     >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
       4.
1117 . foreach var in HP2inthob  {
       5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
       6.  di as input "Full main model for `var' for wave= `j' "
       7. di _skip(4)
       8. di as input  "chunk 8 H1 test:Gender= male  model Wave =  `j' for `e(depv
     > ar)' "
       9. di _skip(4)
      10.
```

```
1118 .
1119 .       xi: logistic `var' age   ///
    >                 radhlw`j' avgcumdosew`j'  ///
    >                  shfamw`j'  bf4 ///
    >                  bf40 bf4Xd2 bf40Xd2 if gender==1, coef  difficult iterate(5
    > 0)
     11.                         estat class
     12.                         estat gof
     13.                         fitstat
     14. }
     15. }

                  storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------

    age             double %8.0g                * Respondent's age
    educ1           byte   %8.0g                  educ==1. did not graduate high
                                                    school
    educ2           byte   %8.0g                  educ==2. graduated high school
    educ3           byte   %8.0g                  educ==3. technical degree
    educ4           byte   %8.0g                  educ==4. did not finish
                                                    college/bachelor's
    educ5           byte   %8.0g                  educ==5. graduated
                                                    college/bachelor's
    educ6           byte   %8.0g                  educ==6. finished
                                                    specialist/master's degree
    educ7           byte   %8.0g                  educ==7. doctor of science/phd
    marrw21         byte   %8.0g                  marrw2==1. single
    marrw22         byte   %8.0g                  marrw2==2. cohabitating
    marrw23         byte   %8.0g                  marrw2==3. married
    marrw24         byte   %8.0g                  marrw2==4. separated
    marrw25         byte   %8.0g                  marrw2==5. divorced
    marrw26         byte   %8.0g                  marrw2==6. widowed
    inc1w2          double %15.0g      LABJ       Income is not sufficient for
                                                    basic neccessities in 1996
    inc2w2          double %15.0g      LABJ       Income is just sufficient for
                                                    basic neccessities in 1996
    inc3w2          double %15.0g      LABJ       Income is sufficient for basics
                                                    plus extra purchases/savings
                                                    in 1996
    inc4w2          double %15.0g      LABJ       Income allows to comfortably
                                                    afford luxury items in 1996
    bf1             float  %9.0g                  bf1 = max(0, kzchorn - 40)
    bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)
    bf9             float  %9.0g                  bf9= max(0, 30 - shhlw1)
    bf11            float  %9.0g                  bf11= max(0, 20 - sufamw1)
    bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)
    bf15m           float  %9.0g                  bf15m= max(0, 1 - icdxcnt) * bf2
    bf30            float  %9.0g                  bf30 = max(0, neiw1 - 85) * bf20
```

bf40 float %9.0g **bf40 = max(0, icdxcnt - 1.01635E-007)**

Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= male model Wave = 2 for HP2inthob

Logistic regression	Number of obs	=	**339**
	LR chi2(**8**)	=	**68.60**
	Prob > chi2	=	**0.0000**
Log likelihood = **-84.646353**	Pseudo R2	=	**0.2884**

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	**.019434**	**.0190292**	**1.02**	**0.307**	**-.0178625**	**.0567305**
radhlw2	**.0239518**	**.0073094**	**3.28**	**0.001**	**.0096255**	**.038278**
avgcumdosew2	**2.556026**	**1.455092**	**1.76**	**0.079**	**-.2959014**	**5.407954**
shfamw2	**-.0013078**	**.0052959**	**-0.25**	**0.805**	**-.0116875**	**.0090719**
bf4	**.0106918**	**.0838793**	**0.13**	**0.899**	**-.1537086**	**.1750922**
bf40	**.4187179**	**.1715551**	**2.44**	**0.015**	**.082476**	**.7549597**
bf4Xd2	**-.1876111**	**.108152**	**-1.73**	**0.083**	**-.3995851**	**.0243629**
bf40Xd2	**-.2942793**	**.1683543**	**-1.75**	**0.080**	**-.6242477**	**.035689**
_cons	**-5.700963**	**1.702573**	**-3.35**	**0.001**	**-9.037944**	**-2.363982**

Note: 1 failure and 0 successes completely determined.

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	**14**	**7**	**21**
-	**24**	**294**	**318**
Total	**38**	**301**	**339**

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	**36.84%**
Specificity	Pr(-|~D)	**97.67%**
Positive predictive value	Pr(D| +)	**66.67%**
Negative predictive value	Pr(~D| -)	**92.45%**
False + rate for true ~D	Pr(+|~D)	**2.33%**
False - rate for true D	Pr(-| D)	**63.16%**
False + rate for classified +	Pr(~D| +)	**33.33%**
False - rate for classified -	Pr(D| -)	**7.55%**

```
Correctly classified                       90.86%

Logistic model for HP2inthob, goodness-of-fit test

       number of observations =       339
 number of covariate patterns =       334
            Pearson chi2(325) =       281.60
                  Prob > chi2 =         0.9606

Measures of Fit for logistic of HP2inthob

Log-Lik Intercept Only:     -118.946    Log-Lik Full Model:           -84.646
D(330):                      169.293    LR(8):                         68.598
                                        Prob > LR:                      0.000
McFadden's R2:                 0.288    McFadden's Adj R2:              0.213
Maximum Likelihood R2:         0.183    Cragg & Uhler's R2:             0.363
McKelvey and Zavoina's R2:     0.691    Efron's R2:                     0.260
Variance of y*:               10.643    Variance of error:              3.290
Count R2:                      0.909    Adj Count R2:                   0.184
AIC:                           0.552    AIC*n:                        187.293
BIC:                       -1753.287    BIC':                         -21.990

1120 . scalar SigDoseInthbMw2 = "no"

1121 . scalar MainEffInthbMw2 = "age radhlw2 shfamw2"

1122 . scalar InthbModMw2 = "none"

1123 .
1124 . *------chunk 8  female moderator models
1125 . title4 "trimmed Moderators of female Dose => Interests and Hobbies Impact"

trimmed Moderators of female Dose => Interests and Hobbies Impact
```

```
1126 .
1127 .
1128 . forvalues j = 2/2 {
       2. set more off
       3.
1129 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
     >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
       4.
1130 . foreach var in HP2inthob  {
       5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
       6.  di as input "Full main model for `var' for wave= `j' "
       7. di _skip(4)
       8. di as input  "chunk 8 H1 test:Gender= male  model Wave =  `j' for `e(depv
     > ar)' "
       9. di _skip(4)
      10. title "Full Nottingham Part 2 subscale models for females "
      11.
1131 .       xi: logistic `var' age   ///
     >                 radhlw`j' avgcumdosew`j' ///
     >                    bf4  ///
     >                  if gender==2, coef  difficult iterate(50)
      12.                         estat class
      13.                         estat gof
      14.                         fitstat
      15. }
      16. }

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------

     age             double %8.0g                 * Respondent's age
     educ1           byte   %8.0g                   educ==1. did not graduate high
                                                      school
     educ2           byte   %8.0g                   educ==2. graduated high school
     educ3           byte   %8.0g                   educ==3. technical degree
     educ4           byte   %8.0g                   educ==4. did not finish
                                                      college/bachelor's
     educ5           byte   %8.0g                   educ==5. graduated
                                                      college/bachelor's
     educ6           byte   %8.0g                   educ==6. finished
                                                      specialist/master's degree
     educ7           byte   %8.0g                   educ==7. doctor of science/phd
     marrw21         byte   %8.0g                   marrw2==1. single
     marrw22         byte   %8.0g                   marrw2==2. cohabitating
     marrw23         byte   %8.0g                   marrw2==3. married
     marrw24         byte   %8.0g                   marrw2==4. separated
     marrw25         byte   %8.0g                   marrw2==5. divorced
     marrw26         byte   %8.0g                   marrw2==6. widowed
     inc1w2          double %15.0g      LABJ        Income is not sufficient for
```

```
                                                    basic neccessities in 1996
inc2w2          double %15.0g      LABJ          Income is just sufficient for
                                                    basic neccessities in 1996
inc3w2          double %15.0g      LABJ          Income is sufficient for basics
                                                    plus extra purchases/savings
                                                    in 1996
inc4w2          double %15.0g      LABJ          Income allows to comfortably
                                                    afford luxury items in 1996
bf1             float  %9.0g                     bf1 = max(0, kzchorn - 40)
bf4             float  %9.0g                     bf4 = max(0, 24 - BSIsoma)
bf9             float  %9.0g                     bf9= max(0, 30 - shhlw1)
bf11            float  %9.0g                     bf11= max(0, 20 - sufamw1)
bf4m            float  %9.0g                     bf4m = max(0, 32 - BSIsoma)
bf15m           float  %9.0g                     bf15m= max(0, 1 - icdxcnt) * bf2
bf30            float  %9.0g                     bf30 = max(0, neiw1 - 85) * bf20
bf40            float  %9.0g                     bf40 = max(0, icdxcnt -
                                                    1.01635E-007)
Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= male  model Wave =  2 for HP2inthob


*******************************************************************************
> *
*******************************************************************************
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****        Full Nottingham Part 2 subscale models for females            ****
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****                                             17 Jun 2012    10:09:38  ****
> *
*******************************************************************************
> *
*******************************************************************************
> *
```

Logistic regression

	Number of obs	=	**363**
	LR chi2(**4**)	=	**85.23**
	Prob > chi2	=	**0.0000**
Log likelihood = **-129.49784**	Pseudo R2	=	**0.2476**

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	**.0747628**	**.0160244**	**4.67**	**0.000**	**.0433556**	**.10617**
radhlw2	**.0174604**	**.0053569**	**3.26**	**0.001**	**.0069611**	**.0279597**
avgcumdosew2	**.0556287**	**.0871446**	**0.64**	**0.523**	**-.1151717**	**.226429**
bf4	**-.0957645**	**.0312145**	**-3.07**	**0.002**	**-.1569439**	**-.0345852**
_cons	**-5.962105**	**1.09169**	**-5.46**	**0.000**	**-8.101778**	**-3.822431**

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	**27**	**8**	**35**
-	**39**	**289**	**328**
Total	**66**	**297**	**363**

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	**40.91%**
Specificity	Pr(-|~D)	**97.31%**
Positive predictive value	Pr(D| +)	**77.14%**
Negative predictive value	Pr(~D| -)	**88.11%**
False + rate for true ~D	Pr(+|~D)	**2.69%**
False - rate for true D	Pr(-| D)	**59.09%**
False + rate for classified +	Pr(~D| +)	**22.86%**
False - rate for classified -	Pr(D| -)	**11.89%**
Correctly classified		**87.05%**

Logistic model for HP2inthob, goodness-of-fit test

number of observations =	**363**
number of covariate patterns =	**361**
Pearson chi2(**356**) =	**453.01**
Prob > chi2 =	**0.0004**

```
Measures of Fit for logistic of HP2inthob

Log-Lik Intercept Only:     -172.113     Log-Lik Full Model:           -129.498
D(358):                      258.996     LR(4):                          85.229
                                         Prob > LR:                       0.000
McFadden's R2:                 0.248     McFadden's Adj R2:               0.219
Maximum Likelihood R2:         0.209     Cragg & Uhler's R2:              0.342
McKelvey and Zavoina's R2:     0.407     Efron's R2:                      0.292
Variance of y*:                5.547     Variance of error:               3.290
Count R2:                      0.871     Adj Count R2:                    0.288
AIC:                           0.741     AIC*n:                         268.996
BIC:                       -1851.201     BIC':                          -61.652

1132 . scalar SigdoseInthbFw2 = "no"

1133 . scalar MainEffInthbFw2 = "age radhlw2 bf4"

1134 .
1135 . title4 "*------chunk 8 testing female interests and hobbies moderators"
     ------------------------------------------------------------------------------
     *------chunk 8 testing female interests and hobbies moderators
     ------------------------------------------------------------------------------

1136 .
1137 .
1138 . forvalues j = 2/2 {
       2. set more off
       3.
1139 . des age educ1-educ7 marrw`j'1-marrw`j'6 inc1w`j'-inc4w`j' ///
     >   bf1 bf4 bf9 bf11 bf4m bf15m bf30 bf40
       4.
1140 . foreach var in HP2inthob  {
       5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
       6. di _skip(4)
       7.  di as input "Full main model for `var' for wave= `j' "
       8. di _skip(4)
       9. di as input  "chunk 8 H1 test:Gender= male  model Wave =  `j' for `e(depv
     > ar)' "
      10. di _skip(4)
      11.
```

```
1141 .       xi: logistic `var' age   ///
     >                radhlw`j' avgcumdosew`j' ///
     >                   bf4  bf4Xd2 ageXd2 radhlw2Xd2 ///
     >                 if gender==2, coef  difficult iterate(50)
      12.                         estat class
      13.                         estat gof
      14.                         fitstat
      15. }
      16. }
```

variable name	storage type	display format	value label	variable label
age	double	%8.0g		* **Respondent's age**
educ1	byte	%8.0g		**educ==1. did not graduate high school**
educ2	byte	%8.0g		**educ==2. graduated high school**
educ3	byte	%8.0g		**educ==3. technical degree**
educ4	byte	%8.0g		**educ==4. did not finish college/bachelor's**
educ5	byte	%8.0g		**educ==5. graduated college/bachelor's**
educ6	byte	%8.0g		**educ==6. finished specialist/master's degree**
educ7	byte	%8.0g		**educ==7. doctor of science/phd**
marrw21	byte	%8.0g		**marrw2==1. single**
marrw22	byte	%8.0g		**marrw2==2. cohabitating**
marrw23	byte	%8.0g		**marrw2==3. married**
marrw24	byte	%8.0g		**marrw2==4. separated**
marrw25	byte	%8.0g		**marrw2==5. divorced**
marrw26	byte	%8.0g		**marrw2==6. widowed**
inc1w2	double	%15.0g	LABJ	**Income is not sufficient for basic neccessities in 1996**
inc2w2	double	%15.0g	LABJ	**Income is just sufficient for basic neccessities in 1996**
inc3w2	double	%15.0g	LABJ	**Income is sufficient for basics plus extra purchases/savings in 1996**
inc4w2	double	%15.0g	LABJ	**Income allows to comfortably afford luxury items in 1996**
bf1	float	%9.0g		**bf1 = max(0, kzchorn - 40)**
bf4	float	%9.0g		**bf4 = max(0, 24 - BSIsoma)**
bf9	float	%9.0g		**bf9= max(0, 30 - shhlw1)**
bf11	float	%9.0g		**bf11= max(0, 20 - sufamw1)**
bf4m	float	%9.0g		**bf4m = max(0, 32 - BSIsoma)**
bf15m	float	%9.0g		**bf15m= max(0, 1 - icdxcnt) * bf2**
bf30	float	%9.0g		**bf30 = max(0, neiw1 - 85) * bf20**
bf40	float	%9.0g		**bf40 = max(0, icdxcnt - 1.01635E-007)**

Full main model for HP2inthob for wave= 2

chunk 8 H1 test:Gender= male model Wave = 2 for HP2inthob

Logistic regression

Number of obs	=	363
LR chi2(7)	=	87.82
Prob > chi2	=	0.0000
Pseudo R2	=	0.2551

Log likelihood = **-128.20013**

HP2inthob	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
age	.069622	.0190503	3.65	0.000	.0322841	.1069599
radhlw2	.0222021	.0063839	3.48	0.001	.00969	.0347143
avgcumdosew2	.0545345	.7778922	0.07	0.944	-1.470106	1.579175
bf4	-.096555	.0395926	-2.44	0.015	-.1741551	-.0189549
bf4Xd2	-.0006382	.0261986	-0.02	0.981	-.0519866	.0507102
ageXd2	.0057178	.0123652	0.46	0.644	-.0185176	.0299531
radhlw2Xd2	-.0041808	.003242	-1.29	0.197	-.0105349	.0021734
_cons	-6.018454	1.285872	-4.68	0.000	-8.538717	-3.498191

Logistic model for HP2inthob

	True		
Classified	D	~D	Total
+	28	9	37
-	38	288	326
Total	66	297	363

Classified + if predicted Pr(D) >= .5
True D defined as HP2inthob != 0

Sensitivity	Pr(+| D)	42.42%
Specificity	Pr(-|~D)	96.97%
Positive predictive value	Pr(D| +)	75.68%
Negative predictive value	Pr(~D| -)	88.34%
False + rate for true ~D	Pr(+|~D)	3.03%
False - rate for true D	Pr(-| D)	57.58%
False + rate for classified +	Pr(~D| +)	24.32%
False - rate for classified -	Pr(D| -)	11.66%
Correctly classified		87.05%

Logistic model for HP2inthob, goodness-of-fit test

```
       number of observations =       363
 number of covariate patterns =       361
            Pearson chi2(353) =       461.27
                  Prob > chi2 =         0.0001

Measures of Fit for logistic of HP2inthob

Log-Lik Intercept Only:     -172.113    Log-Lik Full Model:          -128.200
D(355):                      256.400    LR(7):                         87.825
                                        Prob > LR:                      0.000
McFadden's R2:                 0.255    McFadden's Adj R2:              0.209
Maximum Likelihood R2:         0.215    Cragg & Uhler's R2:             0.351
McKelvey and Zavoina's R2:     0.419    Efron's R2:                     0.304
Variance of y*:                5.660    Variance of error:              3.290
Count R2:                      0.871    Adj Count R2:                   0.288
AIC:                           0.750    AIC*n:                        272.400
BIC:                       -1836.113    BIC':                         -46.564

1142 . scalar InthbModFw2 = "none"

1143 .
1144 . title4 " dose-  interests and hobbies  mediator effect models"
```

dose- interests and hobbies mediator effect models

```
1145 .
1146 . * age is a mediating effect for males for Dose=> sex life for men
1147 .
1148 . glm age avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1330.6004

Generalized linear models                          No. of obs      =        340
Optimization     : ML                              Residual df     =        338
                                                   Scale parameter =   147.6853
Deviance         =  49917.64009                    (1/df) Deviance =   147.6853
Pearson          =  49917.64009                    (1/df) Pearson  =   147.6853

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   7.838826
Log likelihood   =   -1330.6004                    BIC             =   47947.46
```

```
-----------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
 avgcumdosew2 |   .5832314   .2635871     2.21   0.027     .0666101    1.099853
       _cons |   48.62133   .7061562    68.85   0.000     47.23729    50.00537
-----------------------------------------------------------------------------

1149 . glm HP2inthob age  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  224.8585
     Iteration 2:   deviance =  219.8355
     Iteration 3:   deviance =  219.6997
     Iteration 4:   deviance =  219.6996
     Iteration 5:   deviance =  219.6996

     Generalized linear models                          No. of obs      =       340
     Optimization     : MQL Fisher scoring              Residual df     =       338
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  219.6996277                    (1/df) Deviance =  .6499989
     Pearson          =  354.7105724                    (1/df) Pearson  =   1.04944

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1750.484

     -----------------------------------------------------------------------------
                  |                 EIM
        HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+---------------------------------------------------------------
              age |    .031726   .0062563     5.07   0.000     .0194638    .0439882
            _cons |  -2.867608    .344284    -8.33   0.000    -3.542392   -2.192824
     -----------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1150 .
```

```
1151 .
1152 . des illw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
illw2           double %8.0g                  Total number of illnesses
                                                experienced in time period
                                                1987-1996

1153 . glm illw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -303.59609

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  .3512988
Deviance         =  118.7390083                    (1/df) Deviance =  .3512988
Pearson          =  118.7390083                    (1/df) Pearson  =  .3512988

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  1.797624
Log likelihood   = -303.5960853                    BIC             = -1851.445

------------------------------------------------------------------------------
             |                 OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .0085423   .0128556     0.66   0.506    -.0166543    .0337389
       _cons |   .2741359   .0344406     7.96   0.000     .2066336    .3416382
------------------------------------------------------------------------------

1154 . glm HP2inthob illw2 if gender==1, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  237.2651
Iteration 2:   deviance =  236.0196
Iteration 3:   deviance =  236.0142
Iteration 4:   deviance =  236.0142
Iteration 5:   deviance =  236.0142

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       338
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  236.0141663                    (1/df) Deviance =  .6982668
Pearson          =    338.89241                    (1/df) Pearson  =   1.00264
```

```
Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1734.169

------------------------------------------------------------------------------
             |                 EIM
   HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       illw2 |   .2044103    .113873     1.80   0.073    -.0187766    .4275973
       _cons |  -1.284117   .0852302   -15.07   0.000    -1.451165   -1.117069
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1155 .
1156 . des radhlw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
radhlw2         double %8.0g                  Self-perceived Chornobyl health
                                                threat in Wave 2

1157 . glm radhlw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1693.4076

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  1247.933
Deviance         =  421801.4584                    (1/df) Deviance =  1247.933
Pearson          =  421801.4584                    (1/df) Pearson  =  1247.933

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  9.972986
Log likelihood   = -1693.407647                    BIC             =  419831.3

------------------------------------------------------------------------------
             |                 OIM
     radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.220373    .766216     1.59   0.111    -.2813831    2.722128
       _cons |   45.63198   2.052711    22.23   0.000     41.60874    49.65522
------------------------------------------------------------------------------
```

```
1158 . glm HP2inthob radhlw2 if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  207.4869
     Iteration 2:   deviance =  195.0786
     Iteration 3:   deviance =  193.7239
     Iteration 4:   deviance =  193.6942
     Iteration 5:   deviance =  193.6942
     Iteration 6:   deviance =  193.6942

     Generalized linear models                          No. of obs      =        340
     Optimization     : MQL Fisher scoring              Residual df     =        338
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =   193.694234                    (1/df) Deviance =   .5730599
     Pearson          =  330.3909814                    (1/df) Pearson  =   .9774881

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1776.489

     ------------------------------------------------------------------------------
                  |                 EIM
        HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
          radhlw2 |   .0187765   .0024049     7.81   0.000      .014063      .02349
            _cons |  -2.360804   .1846104   -12.79   0.000    -2.722634   -1.998974
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1159 .
1160 .
1161 . des shfamw2

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     shfamw2         double %8.0g                  Percentage of strains and
                                                     hassles related to family in
                                                     1996
```

```
1162 . glm shfamw2  avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1704.8947

     Generalized linear models                          No. of obs      =        339
     Optimization     : ML                              Residual df     =        337
                                                        Scale parameter =   1375.284
     Deviance         =   463470.769                    (1/df) Deviance =   1375.284
     Pearson          =   463470.769                    (1/df) Pearson  =   1375.284

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   10.07017
     Log likelihood   = -1704.894657                    BIC             =   461507.4

     ------------------------------------------------------------------------------
                  |                 OIM
          shfamw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |  -.7484378   .8043765    -0.93   0.352    -2.324987    .8281112
            _cons |   34.76184    2.15791    16.11   0.000     30.53241    38.99127
     ------------------------------------------------------------------------------

1163 . glm HP2inthob shfamw2 if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  236.0134
     Iteration 2:   deviance =   234.459
     Iteration 3:   deviance =  234.4495
     Iteration 4:   deviance =  234.4495

     Generalized linear models                          No. of obs      =        339
     Optimization     : MQL Fisher scoring              Residual df     =        337
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  234.4495475                    (1/df) Deviance =    .695696
     Pearson          =  340.0883436                    (1/df) Pearson  =   1.009164

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1728.912
```

```
------------------------------------------------------------------------------
             |                 EIM
   HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     shfamw2 |   .0043459   .0019602     2.22   0.027     .0005039    .0081879
       _cons |  -1.379269   .1084635   -12.72   0.000    -1.591853   -1.166684
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1164 .
1165 . des bf5m

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
bf5m            float  %9.0g                  bf5m = max(0, ecprw3 - 75) *
                                                bf4m

1166 . glm bf5m  avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -2273.2523

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  37801.15
Deviance         =  12776789.76                    (1/df) Deviance =  37801.15
Pearson          =  12776789.76                    (1/df) Pearson  =  37801.15

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  13.38384
Log likelihood   = -2273.252279                    BIC             =  1.28e+07

------------------------------------------------------------------------------
             |                 OIM
        bf5m |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   9.243905   4.217043     2.19   0.028     .9786526    17.50916
       _cons |   104.6228   11.29756     9.26   0.000     82.47996    126.7656
------------------------------------------------------------------------------
```

```
1167 . glm HP2inthob bf5m  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  238.9021
     Iteration 2:   deviance =  238.0124
     Iteration 3:   deviance =  238.0098
     Iteration 4:   deviance =  238.0098
     Iteration 5:   deviance =  238.0098

     Generalized linear models                          No. of obs      =        340
     Optimization     : MQL Fisher scoring              Residual df     =        338
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  238.0098185                    (1/df) Deviance =   .7041711
     Pearson          =  339.8073754                    (1/df) Pearson  =   1.005347

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1732.174

     ------------------------------------------------------------------------------
                  |                 EIM
        HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
             bf5m |   .0001615    .000378     0.43   0.669    -.0005794    .0009024
            _cons |  -1.236147   .0878768   -14.07   0.000    -1.408382   -1.063912
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1168 .
1169 . glm bf4 avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1027.1225

     Generalized linear models                          No. of obs      =        340
     Optimization     : ML                              Residual df     =        338
                                                        Scale parameter =    24.7771
     Deviance         =  8374.659221                    (1/df) Deviance =    24.7771
     Pearson          =  8374.659221                    (1/df) Pearson  =    24.7771

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   6.053662
     Log likelihood   = -1027.122509                    BIC             =   6404.476
```

bf4	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	**-.0331637**	**.1079644**	**-0.31**	**0.759**	**-.2447701**	**.1784427**
_cons	**12.52896**	**.2892393**	**43.32**	**0.000**	**11.96206**	**13.09586**

```
1170 . glm HP2inthob bf4  if gender==1, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  201.5914
Iteration 2:   deviance =  191.8769
Iteration 3:   deviance =  191.2682
Iteration 4:   deviance =  191.2622
Iteration 5:   deviance =  191.2622
Iteration 6:   deviance =  191.2622

Generalized linear models                          No. of obs      =        340
Optimization     : MQL Fisher scoring              Residual df     =        338
                   (IRLS EIM)                      Scale parameter =          1
Deviance         =  191.2622075                    (1/df) Deviance =   .5658645
Pearson          =   305.593706                    (1/df) Pearson  =   .9041234

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             =  -1778.921
```

HP2inthob	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
bf4	**-.1182178**	**.013496**	**-8.76**	**0.000**	**-.1446695**	**-.091766**
_cons	**.0441185**	**.1517879**	**0.29**	**0.771**	**-.2533804**	**.3416174**

(Standard errors scaled using square root of deviance-based dispersion.)

```
1171 .
1172 .
1173 . scalar inthobMw2 = "age "

1174 .
1175 . * age is a mediating effect for females for Dose=> sex life for women
1176 . glm age avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1406.9403

     Generalized linear models                          No. of obs      =       363
     Optimization     : ML                              Residual df     =       361
                                                        Scale parameter =  136.9184
     Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
     Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =  7.762756
     Log likelihood   = -1406.940271                    BIC             =  47299.65

     ------------------------------------------------------------------------------
                  |                 OIM
              age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
            _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
     ------------------------------------------------------------------------------

1177 . glm HP2inthob age  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  293.9671
     Iteration 2:   deviance =    289.27
     Iteration 3:   deviance =  289.1951
     Iteration 4:   deviance =  289.1951
     Iteration 5:   deviance =  289.1951

     Generalized linear models                          No. of obs      =       363
     Optimization     : MQL Fisher scoring              Residual df     =       361
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  289.1950995                    (1/df) Deviance =  .8010945
     Pearson          =  415.3464621                    (1/df) Pearson  =  1.150544

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1838.684
```

HP2inthob	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0515323	.0068567	7.52	0.000	.0380933	.0649713
_cons	-3.649661	.3847198	-9.49	0.000	-4.403698	-2.895624

(Standard errors scaled using square root of deviance-based dispersion.)

```
1178 .
1179 . * illw2 is a mediating effect for females for Dose=> sex life for women
1180 . glm illw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -463.51524

Generalized linear models                         No. of obs      =        363
Optimization     : ML                             Residual df     =        361
                                                  Scale parameter =    .756881
Deviance         =  273.2340487                   (1/df) Deviance =    .756881
Pearson          =  273.2340487                   (1/df) Pearson  =    .756881

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   2.564822
Log likelihood   = -463.5152411                   BIC             =  -1854.645
```

illw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	.1249912	.0331157	3.77	0.000	.0600856	.1898968
_cons	.301285	.0544484	5.53	0.000	.194568	.4080019

```
1181 . glm HP2inthob illw2  if gender==2, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  337.9924
Iteration 2:   deviance =  337.8991
Iteration 3:   deviance =  337.8989
Iteration 4:   deviance =  337.8989

Generalized linear models                         No. of obs      =        363
Optimization     : MQL Fisher scoring             Residual df     =        361
                   (IRLS EIM)                     Scale parameter =          1
Deviance         =  337.8988998                   (1/df) Deviance =    .936008
Pearson          =  362.1873188                   (1/df) Pearson  =   1.003289
```

```
Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             = -1789.981

------------------------------------------------------------------------------
             |                 EIM
   HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       illw2 |    .204938   .0789434     2.60   0.009     .0502118    .3596641
       _cons |  -1.005064   .0841351   -11.95   0.000    -1.169965   -.8401618
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1182 .
1183 . des bf4   // soma recentered

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
bf4             float  %9.0g                  bf4 = max(0, 24 - BSIsoma)

1184 . * bf4 is a mediting effect for females for Dose=>  sex life for women
1185 . glm bf4  avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1109.0983

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =  26.53281
Deviance         =  9578.344971                    (1/df) Deviance =  26.53281
Pearson          =  9578.344971                    (1/df) Pearson  =  26.53281

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  6.121754
Log likelihood   = -1109.098281                    BIC             =  7450.466

------------------------------------------------------------------------------
             |                 OIM
         bf4 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   -.595012   .1960703    -3.03   0.002    -.9793027   -.2107212
       _cons |   11.02048   .3223763    34.19   0.000     10.38863    11.65232
------------------------------------------------------------------------------
```

```
1186 . glm HP2inthob bf4  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  304.5744
     Iteration 2:   deviance =   301.504
     Iteration 3:   deviance =  301.4488
     Iteration 4:   deviance =  301.4487
     Iteration 5:   deviance =  301.4487

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  301.4486672                    (1/df) Deviance =   .8350379
     Pearson          =  341.1451194                    (1/df) Pearson  =   .9450003

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1826.431

     ------------------------------------------------------------------------------
                  |                 EIM
        HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
              bf4 |  -.0993749   .0142594    -6.97   0.000    -.1273229    -.071427
            _cons |   .0117358   .1447759     0.08   0.935    -.2720197    .2954914
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1187 .
1188 . des bf4m // soma recentered

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     bf4m            float  %9.0g                  bf4m = max(0, 32 - BSIsoma)

1189 . * bf4m is a possible mediating effect for female sex life
```

```
1190 . glm bf4m  avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1140.8259

     Generalized linear models                          No. of obs      =        363
     Optimization     : ML                              Residual df     =        361
                                                        Scale parameter =   31.60104
     Deviance         =  11407.97484                    (1/df) Deviance =   31.60104
     Pearson          =  11407.97484                    (1/df) Pearson  =   31.60104

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   6.296561
     Log likelihood   = -1140.825904                    BIC             =   9280.095

     ------------------------------------------------------------------------------
                  |                 OIM
             bf4m |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   -.599311   .2139789    -2.80   0.005    -1.018702   -.1799202
            _cons |   18.83424   .3518214    53.53   0.000     18.14469     19.5238
     ------------------------------------------------------------------------------

1191 . glm HP2sxlife bf4m  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  356.1451
     Iteration 2:   deviance =  355.6209
     Iteration 3:   deviance =  355.6178
     Iteration 4:   deviance =  355.6178
     Iteration 5:   deviance =  355.6178

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  355.6178202                    (1/df) Deviance =   .9850909
     Pearson          =  340.0032816                    (1/df) Pearson  =   .9418373

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1772.262
```

HP2sxlife	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
bf4m	**-.0990193**	**.0135516**	**-7.31**	**0.000**	**-.12558**	**-.0724586**
_cons	**1.063679**	**.244399**	**4.35**	**0.000**	**.584666**	**1.542693**

(Standard errors scaled using square root of deviance-based dispersion.)

```
1192 .
1193 . des shfamw2
```

variable name	storage type	display format	value label	variable label
shfamw2	double	%8.0g		**Percentage of strains and hassles related to family in 1996**

```
1194 . glm shfamw2  avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1704.8947

Generalized linear models                          No. of obs      =        339
Optimization     : ML                              Residual df     =        337
                                                   Scale parameter =   1375.284
Deviance         =   463470.769                    (1/df) Deviance =   1375.284
Pearson          =   463470.769                    (1/df) Pearson  =   1375.284

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   10.07017
Log likelihood   = -1704.894657                    BIC             =   461507.4
```

shfamw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf. Interval]	
avgcumdosew2	**-.7484378**	**.8043765**	**-0.93**	**0.352**	**-2.324987**	**.8281112**
_cons	**34.76184**	**2.15791**	**16.11**	**0.000**	**30.53241**	**38.99127**

```
1195 . glm HP2sxlife shfamw2 if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  338.2157
     Iteration 2:   deviance =  338.0066
     Iteration 3:   deviance =  338.0065
     Iteration 4:   deviance =  338.0065

     Generalized linear models                         No. of obs      =        339
     Optimization     : MQL Fisher scoring             Residual df     =        337
                        (IRLS EIM)                     Scale parameter =          1
     Deviance         =  338.0064771                   (1/df) Deviance =   1.002987
     Pearson          =  339.3157137                   (1/df) Pearson  =   1.006872

     Variance function: V(u) = u*(1-u)                 [Bernoulli]
     Link function    : g(u) = invnorm(u)              [Probit]

                                                       BIC             =  -1625.356

     ------------------------------------------------------------------------------
                  |                 EIM
        HP2sxlife |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
          shfamw2 |   .0027669   .0020626     1.34   0.180    -.0012757    .0068096
            _cons |  -.9380005   .1081399    -8.67   0.000    -1.149951   -.7260503
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1196 .
1197 . des shrelaw2

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     shrelaw2        double %8.0g                  Percentage of strains and
                                                     hassles related to
                                                     relationships in 1996
```

```
1198 . glm shrelaw2  avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1686.1612

     Generalized linear models                          No. of obs      =        339
     Optimization     : ML                              Residual df     =        337
                                                        Scale parameter =   1231.384
     Deviance         =   414976.438                    (1/df) Deviance =   1231.384
     Pearson          =   414976.438                    (1/df) Pearson  =   1231.384

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =   9.959653
     Log likelihood   =  -1686.16125                    BIC             =   413013.1

     ------------------------------------------------------------------------------
                  |                 OIM
         shrelaw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
     avgcumdosew2 |   .6230115   .7612097     0.82   0.413     -.868932    2.114955
            _cons |   26.21356   2.042278    12.84   0.000     22.21077    30.21635
     ------------------------------------------------------------------------------

1199 . glm HP2inthob shrelaw2 if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =   236.715
     Iteration 2:   deviance =  235.3689
     Iteration 3:   deviance =  235.3625
     Iteration 4:   deviance =  235.3625

     Generalized linear models                          No. of obs      =        339
     Optimization     : MQL Fisher scoring              Residual df     =        337
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  235.3625161                    (1/df) Deviance =   .6984051
     Pearson          =   339.597009                    (1/df) Pearson  =   1.007706

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =      -1728
```

```
             |                 EIM
   HP2inthob |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    shrelaw2 |   .0038952   .0020421     1.91   0.056    -.0001073    .0078976
       _cons |  -1.331337   .0990092   -13.45   0.000    -1.525391   -1.137282
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1200 .
1201 . title4 "6. Summary matrix for dose - interests and hobbies impact"
------------------------------------------------------------------------------
     6. Summary matrix for dose - interests and hobbies impact
------------------------------------------------------------------------------

1202 . *xx summary of mediating effects: males only age and illw2  2
1203 . *xx           females: age
1204 .
1205 .
1206 .
1207 . * summary of inthob  moderator effects  none
1208 . scalar inthobMedMw2 = "age "

1209 . scalar inthobMedFw2 = "age bf4 illw2 bf4m"

1210 .
1211 . * no sign main dose effect for males
1212 . * no male moderators
1213 . * 3 signif main effects in male main effect model
1214 .
1215 .
1216 . * no signif dose main effect for females
1217 . * 3 main female effects
1218 . * no significant female moderators
1219 . di _skip(4)
```

```
1220 .  matrix define  inthbMw2 = J(1,8, 0)

1221 .         matrix define  inthbFw2 = J(1,8, 0)

1222 . matrix colnames  inthbMw2=  hypnum ptnum wave gender medsig numMAsig numMods
     > ig numMed

1223 . matrix colnames  inthbFw2=  hypnum ptnum wave gender medsig numMAsig numMods
     > ig numMed

1224 .     matrix define  inthbMw2= (1, 2, 3, 1, 0, 3, 0, 1 )

1225 .         matrix define  inthbFw2= (1, 2, 3, 2, 0, 3, 0, 4 )

1226 .         matrix rowname  inthbMw2 =  inthbM

1227 .         matrix rowname  inthbFw2 =  inthobF

1228 .         matlist  inthbMw2

                 |         c1          c2          c3          c4          c5          c
     > 6         c7          c8
     -------------+------------------------------------------------------------------------
     > --------------------------
          inthbM |          1           2           3           1           0
     > 3          0           1

1229 .         matlist  inthbFw2

                 |         c1          c2          c3          c4          c5          c
     > 6         c7          c8
     -------------+------------------------------------------------------------------------
     > --------------------------
         inthobF |          1           2           3           2           0
     > 3          0           4

1230 .         matrix define H1pt2w2 = (  wkMw2 \  wkFw2 \  hmcrMw2 \  hmcrFw2 \  s
     > pMw2 ///
     >             \  spFw2 \  prbfamMw2 \ prbfamFw2 \ sxlifeMw2 \ sxlifeFw2 \ inth
     > bMw2 \  inthbFw2)
```

```
1231 .
1232 .         matlist H1pt2w2

                 |         c1          c2          c3          c4          c5           c
     > 6          c7          c8
     -----------------+-----------------------------------------------------------------------
     > -------------------------
                  r1 |          1           2           2           1           0
     > 2           0           2
                  r1 |          1           2           2           2           0
     > 1           0           2
                  r1 |          1           2           3           1           0
     > 1           0           1
                  r1 |          1           2           3           2           1
     > 1           0           2
               spMw2 |          1           2           3           1           0
     > 4           0           1
               spFw2 |          1           2           3           2           1
     > 5           0           3
           prbfamMw2 |          1           2           3           1           0
     > 3           0           1
           prbfamFw2 |          1           2           3           2           0
     > 3           0           2
           sxlifeMw2 |          1           2           3           1           0
     > 6           0           1
           sxlifeFw2 |          1           2           3           2           0
     > 4           0           5
              inthbM |          1           2           3           1           0
     > 3           0           1
             inthobF |          1           2           3           2           0
     > 3           0           4

1233 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
     > odsig numMed

1234 .     matrix rownames H1pt2w2 =    wkMw2  wkFw2  hmcrMw2  hmcrFw2  socprbMw2
     > socprbFw2  prbfamMw2 prbFamFw2 sxlifeMw2 sxlifeFw2 inthbMw2  inthbFw2
```

```
1235 .     matlist H1pt2w2

               |    hypnum      ptnum       wave     gender     medsig   numMAsi
     > g  numModsig     numMed
---------------+------------------------------------------------------------------
     > ----------------------------
          wkMw2 |         1          2          2          1          0
     > 2          0          2
          wkFw2 |         1          2          2          2          0
     > 1          0          2
        hmcrMw2 |         1          2          3          1          0
     > 1          0          1
        hmcrFw2 |         1          2          3          2          1
     > 1          0          2
      socprbMw2 |         1          2          3          1          0
     > 4          0          1
      socprbFw2 |         1          2          3          2          1
     > 5          0          3
      prbfamMw2 |         1          2          3          1          0
     > 3          0          1
      prbFamFw2 |         1          2          3          2          0
     > 3          0          2
      sxlifeMw2 |         1          2          3          1          0
     > 6          0          1
      sxlifeFw2 |         1          2          3          2          0
     > 4          0          5
       inthbMw2 |         1          2          3          1          0
     > 3          0          1
       inthbFw2 |         1          2          3          2          0
     > 3          0          4

1236 .
1237 . title "7.  h1 pt2 wave 2 Dose=> vacation plans impact  analysis "xxxxxxxxxxx
     > xxxxxxxx


     ******************************************************************************
     > *
     ******************************************************************************
     > *
     *****                                                                    ****
     > *
     *****                                                                    ****
     > *
     *****     7.  h1 pt2 wave 2 Dose=> vacation plans impact  analysis       ****
     > *
     *****                         xxxxxxxxxxxxxxxxxxx                        ****
     > *
     *****                                                                    ****
```

```
> *
*****                                                                   ****
> *
*****                                          17 Jun 2012    10:10:14  ****
> *
****************************************************************************
> *
****************************************************************************
> *



1238 .
1239 .
1240 .
1241 . cap gen hp2vactn = HP2vacatn

1242 .
1243 . forvalues j = 2/2 {
  2. title " H1 pt 2 Wave 2 Dose = >   hp2vactn main effects models"
  3. set more off
  4. local w1bf bf1 bf4 bf9 bf10 bf11 bf4m bf15m bf20 bf22 bf30 bf40
  5. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  6. local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  7. di _skip(3)
  8.
1244 . di as input "Male model Wave 2 dose-hp2vactn moderator model "
  9. di _skip(4)
 10. xi: logistic hp2vactn age i.educ occ1w`j'-occ8w`j' ///
>   marrw`j'1- marrw`j'3 marrw`j'5-marrw`j'6 inc1w`j'-inc4w`j' ///
>   radhlw`j' havmil avgcumdosew`j' `w`j'bf'  ///
>   deaw`j' dvcew`j' sepaw`j' accdw`j' movew`j' ///
>  illw`j' shfamw`j' shhlw`j' shjobw`j' shrelaw`j' suprtw`j' suchrw`j'  havmil
> sq ///
>  radhlw`j' avgcumdosew`j' if gender==1, coef
 11.  di _skip(4)
 12.  title3 "trimmed hp2vactn main effects models for H1 no direct dose effec
> t for male"
 13.  pwcorr hp2hmcare age  deaw2 shjobw2 bf7m shjobw2 havmilsq ///
>   radhlw2 avgcumdosew1 if gender==1, sig obs sidak star(.05) listwise
 14. di _skip(1)
 15. di as input "For males hp2vactn wave3 and d2 is not signif "
 16. di _skip(1)
 17.   logistic hp2vactn age  deaw2 shjobw2 bf7m  havmilsq ///
>   radhlw2 avgcumdosew1 if ///
>    gender==1, coef
 18. }
```

```
********************************************************************************
> *
********************************************************************************
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****       H1 pt 2 Wave 2 Dose = >   hp2vactn main effects models         ****
> *
*****                                                                      ****
> *
*****                                                                      ****
> *
*****                                                17 Jun 2012    10:10:14  ****
> *
********************************************************************************
> *
********************************************************************************
> *


Male model Wave 2 dose-hp2vactn moderator model

i.educ            _Ieduc_1-8          (naturally coded; _Ieduc_1 omitted)
note: _Ieduc_4 != 0 predicts failure perfectly
      _Ieduc_4 dropped and 12 obs not used

note: _Ieduc_7 != 0 predicts failure perfectly
      _Ieduc_7 dropped and 4 obs not used

note: _Ieduc_8 != 0 predicts failure perfectly
      _Ieduc_8 dropped and 2 obs not used

note: occ6w2 != 0 predicts failure perfectly
      occ6w2 dropped and 4 obs not used

note: occ8w2 != 0 predicts failure perfectly
      occ8w2 dropped and 43 obs not used

note: marrw22 != 0 predicts failure perfectly
      marrw22 dropped and 7 obs not used

note: marrw26 != 0 predicts failure perfectly
      marrw26 dropped and 3 obs not used
```

```
note: inc1w2 != 0 predicts failure perfectly
      inc1w2 dropped and 15 obs not used

note: inc4w2 != 0 predicts failure perfectly
      inc4w2 dropped and 10 obs not used

note: sepaw2 != 0 predicts failure perfectly
      sepaw2 dropped and 3 obs not used

note: marrw25 != 0 predicts success perfectly
      marrw25 dropped and 1 obs not used

note: dvcew2 != 0 predicts failure perfectly
      dvcew2 dropped and 2 obs not used

note: _Ieduc_6 omitted because of collinearity
note: bf15 omitted because of collinearity
note: radhlw2 omitted because of collinearity
note: avgcumdosew2 omitted because of collinearity

Logistic regression                               Number of obs   =        226
                                                  LR chi2(34)     =      89.37
                                                  Prob > chi2     =     0.0000
Log likelihood = -56.061123                       Pseudo R2       =     0.4435
```

hp2vactn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0518481	.0320007	1.62	0.105	-.0108721	.1145682
_Ieduc_2	-.8995561	1.385138	-0.65	0.516	-3.614377	1.815265
_Ieduc_3	-.9705268	.7645926	-1.27	0.204	-2.469101	.5280471
_Ieduc_4	0	(omitted)				
_Ieduc_5	.2832276	.9129115	0.31	0.756	-1.506046	2.072501
_Ieduc_6	0	(omitted)				
_Ieduc_7	0	(omitted)				
_Ieduc_8	0	(omitted)				
occ1w2	.8106927	4.39778	0.18	0.854	-7.808798	9.430184
occ2w2	.6920438	4.410202	0.16	0.875	-7.951794	9.335881
occ3w2	.1305127	4.486304	0.03	0.977	-8.662482	8.923507
occ4w2	.89698	4.456507	0.20	0.840	-7.837613	9.631573
occ5w2	2.521801	4.487812	0.56	0.574	-6.274149	11.31775
occ6w2	0	(omitted)				
occ7w2	-.3588464	4.557173	-0.08	0.937	-9.290741	8.573048
occ8w2	0	(omitted)				
marrw21	-2.421712	1.8269	-1.33	0.185	-6.002369	1.158946
marrw22	0	(omitted)				
marrw23	-3.630848	1.854766	-1.96	0.050	-7.266123	.0044279
marrw25	0	(omitted)				
marrw26	0	(omitted)				

inc1w2	0	(omitted)				
inc2w2	1.85842	4.404089	0.42	0.673	-6.773436	10.49027
inc3w2	2.742231	4.406664	0.62	0.534	-5.894672	11.37913
inc4w2	0	(omitted)				
radhlw2	.0040453	.0113057	0.36	0.720	-.0181135	.0262041
havmil	.0057124	.0149305	0.38	0.702	-.0235508	.0349756
avgcumdosew2	-.2290056	.2971244	-0.77	0.441	-.8113587	.3533474
bf1	-.0014462	.0165487	-0.09	0.930	-.0338809	.0309886
bf4	-.3542988	.0849763	-4.17	0.000	-.5208492	-.1877483
bf6	.0330318	.0142347	2.32	0.020	.0051324	.0609312
bf7	.138525	.1284222	1.08	0.281	-.1131778	.3902278
bf14	-.0001823	.0001057	-1.72	0.085	-.0003895	.0000249
bf15	0	(omitted)				
bf40	.7151656	.2261712	3.16	0.002	.2718781	1.158453
deaw2	-.1293481	.4547459	-0.28	0.776	-1.020634	.7619374
dvcew2	0	(omitted)				
sepaw2	0	(omitted)				
accdw2	.6561002	.566831	1.16	0.247	-.4548681	1.767069
movew2	.8988969	.8083424	1.11	0.266	-.6854251	2.483219
illw2	-.1907347	.4011558	-0.48	0.634	-.9769857	.5955162
shfamw2	.0075499	.0104385	0.72	0.470	-.0129092	.0280089
shhlw2	-.0086364	.01369	-0.63	0.528	-.0354682	.0181955
shjobw2	-.0142832	.0135576	-1.05	0.292	-.0408556	.0122892
shrelaw2	-.0233172	.0117345	-1.99	0.047	-.0463164	-.000318
suprtw2	.0076256	.010193	0.75	0.454	-.0123524	.0276036
suchrw2	-.0031525	.0091098	-0.35	0.729	-.0210073	.0147023
havmilsq	-.00002	.0000344	-0.58	0.560	-.0000874	.0000473
radhlw2	0	(omitted)				
avgcumdosew2	0	(omitted)				
_cons	-2.643954	3.239572	-0.82	0.414	-8.993397	3.70549

```
Note: 1 failure and 0 successes completely determined.
```

```
title3 : trimmed hp2vactn main effects models for H1 no direct dose effect for
>  male
17 Jun 2012
10:10:16
computer  Macintosh (Intel 64-bit)
folder  /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests
> /h1pt2
Data file  chwide16june2012.dta  currrently has  2392  variables and  703  obs
> ervations
```

	hp2hmc~e	age	deaw2	shjobw2	bf7m	shjobw2	havmilsq
hp2hmcare	1.0000						
	340						
age	0.2761*	1.0000					
	0.0000						
	340	340					
deaw2	0.0240	0.2906*	1.0000				
	1.0000	0.0000					
	340	340	340				
shjobw2	0.0806	0.0604	-0.0188	1.0000			
	0.9953	1.0000	1.0000				
	340	340	340	340			
bf7m	-0.1339	-0.0182	0.1279	0.0160	1.0000		
	0.3860	1.0000	0.4863	1.0000			
	340	340	340	340	340		
shjobw2	0.0806	0.0604	-0.0188	1.0000*	0.0160	1.0000	
	0.9953	1.0000	1.0000	0.0000	1.0000		
	340	340	340	340	340	340	
havmilsq	-0.0347	0.0207	-0.0098	-0.0082	-0.0420	-0.0082	1.0000
	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
	340	340	340	340	340	340	340
radhlw2	0.2793*	0.3358*	-0.0218	0.2249*	0.1098	0.2249*	-0.0846
	0.0000	0.0000	1.0000	0.0010	0.7946	0.0010	0.9898
	340	340	340	340	340	340	340
avgcumdosew1	0.0010	0.0918	0.0232	0.0706	0.0206	0.0706	-0.0345
	1.0000	0.9680	1.0000	0.9996	1.0000	0.9996	1.0000
	340	340	340	340	340	340	340

```
             |  radhlw2 avgcum~1
-------------+------------------
     radhlw2 |   1.0000 
             |
             |      340
             |
avgcumdosew1 |   0.0826   1.0000 
             |   0.9929
             |      340      340
             |
```

For males hp2vactn wave3 and d2 is not signif

```
Logistic regression                               Number of obs   =        340
                                                  LR chi2(7)      =      40.46
                                                  Prob > chi2     =     0.0000
Log likelihood = -104.92462                       Pseudo R2       =     0.1616

------------------------------------------------------------------------------
    hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         age |   .0623584   .0170238     3.66   0.000     .0289924    .0957244
       deaw2 |  -.1196817    .316188    -0.38   0.705    -.7393988    .5000354
     shjobw2 |   .0033867   .0046422     0.73   0.466    -.0057118    .0124853
        bf7m |  -.0003419   .0002442    -1.40   0.161    -.0008205    .0001367
    havmilsq |  -5.89e-06   7.80e-06    -0.75   0.451    -.0000212    9.41e-06
     radhlw2 |   .0148258   .0055784     2.66   0.008     .0038923    .0257592
avgcumdosew1 |   -.069755   .1488625    -0.47   0.639      -.36152    .2220101
       _cons |  -5.869014   1.014681    -5.78   0.000    -7.857752   -3.880275
------------------------------------------------------------------------------
```

1245 .

1246 . scalar SigDoseVactnMw2 = "no"

1247 . scalar MainEffVactnMw2 = "age radhlw2 "

```
1248 .
1249 . local cn7:colnames(e(b))

1250 . di "`cn7'"
     age deaw2 shjobw2 bf7m havmilsq radhlw2 avgcumdosew1 _cons

1251 . local len7 = length("`cn7'")

1252 . di `len7'
     58

1253 . local len7b = `len7' - 6

1254 . di `len7b'
     52

1255 . local myvarlist = substr("`cn7'",1,`len7b')

1256 . di "`myvarlist'"
     age deaw2 shjobw2 bf7m havmilsq radhlw2 avgcumdosew1

1257 .
1258 . foreach var in `myvarlist' {
       2. cap gen `var'Xd2 = `var'*avgcumdosew2
       3. }

1259 .
1260 . title " Trimmed male main effects dose=> vacation plans  model"


     ******************************************************************************
     > *
     ******************************************************************************
     > *
     *****                                                                     ****
     > *
     *****                                                                     ****
     > *
     *****       Trimmed male main effects dose=> vacation plans  model        ****
     > *
     *****                                                                     ****
     > *
     *****                                                                     ****
     > *
     *****                                            17 Jun 2012    10:10:17  ****
     > *
     ******************************************************************************
     > *
     ******************************************************************************
```

```
> *


1261 . di as input "No sig main male dose main effects model"
     No sig main male dose main effects model

1262 . sw, pr(.1): logit hp2vacatn `myvarlist' if gender==1
                           begin with full model
     p = 0.7050 >= 0.1000  removing deaw2
     p = 0.6331 >= 0.1000  removing avgcumdosew1
     p = 0.4916 >= 0.1000  removing shjobw2
     p = 0.4627 >= 0.1000  removing havmilsq
     p = 0.1243 >= 0.1000  removing bf7m

     Logistic regression                               Number of obs   =        340
                                                       LR chi2(2)      =      36.09
                                                       Prob > chi2     =     0.0000
     Log likelihood = -107.10862                       Pseudo R2       =     0.1442
```

hp2vacatn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0587352	.0156958	3.74	0.000	.027972	.0894984
radhlw2	.0163217	.005398	3.02	0.002	.0057417	.0269016
_cons	-6.0454	.8953448	-6.75	0.000	-7.800244	-4.290557

```
1263 .
1264 .
1265 . local cn8:colnames(e(b))

1266 . di "`cn8'"
     age radhlw2 _cons

1267 . local len8 = length("`cn8'")
```

```
1268 . di `len7'
     58

1269 . local len8b = `len8' - 6

1270 . di `len8b'
     11

1271 . local myvarlist = substr("`cn8'",1,`len8b')

1272 . di "`myvarlist'"
     age radhlw2

1273 .
1274 . logit hp2vacatn age radhlw2 avgcumdosew2 ageXd2 radhlw2Xd2 if gender==1

     Iteration 0:   log likelihood = -125.15243
     Iteration 1:   log likelihood = -109.21801
     Iteration 2:   log likelihood = -106.67525
     Iteration 3:   log likelihood = -106.57547
     Iteration 4:   log likelihood =  -106.5735
     Iteration 5:   log likelihood =  -106.5735

     Logistic regression                               Number of obs   =        340
                                                       LR chi2(5)      =      37.16
                                                       Prob > chi2     =     0.0000
     Log likelihood =  -106.5735                       Pseudo R2       =     0.1485

     ------------------------------------------------------------------------------
        hp2vacatn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
              age |   .0665329   .0222738     2.99   0.003      .022877    .1101887
          radhlw2 |   .0125498   .0074393     1.69   0.092    -.0020309    .0271304
     avgcumdosew2 |   .1747054   1.332435     0.13   0.896    -2.436818    2.786229
           ageXd2 |  -.0112359   .0243435    -0.46   0.644    -.0589483    .0364764
       radhlw2Xd2 |    .005418   .0075235     0.72   0.471    -.0093278    .0201638
            _cons |  -6.162813    1.25139    -4.92   0.000    -8.615492   -3.710135
     ------------------------------------------------------------------------------
```

```
1275 .
1276 .  title "Trimmed male wave 2 interaction dose=> vacation plans model"


     ******************************************************************************
     > *
     ******************************************************************************
     > *
     *****                                                                    ****
     > *
     *****                                                                    ****
     > *
     *****    Trimmed male wave 2 interaction dose=> vacation plans model      ****
     > *
     *****                                                                    ****
     > *
     *****                                                                    ****
     > *
     *****                                        17 Jun 2012    10:10:28  ****
     > *
     ******************************************************************************
     > *
     ******************************************************************************
     > *


1277 .  logit hp2vacatn age radhlw2 ageXd2 bf7m avgcumdosew2 bf4m bf4mXd2 bf7mXd2 i
     > f gender==1

     Iteration 0:   log likelihood = -125.15243
     Iteration 1:   log likelihood =  -103.6908
     Iteration 2:   log likelihood = -95.548287
     Iteration 3:   log likelihood = -94.791601
     Iteration 4:   log likelihood =  -94.72809
     Iteration 5:   log likelihood =  -94.72726
     Iteration 6:   log likelihood = -94.727259

     Logistic regression                               Number of obs   =        340
                                                       LR chi2(8)      =      60.85
                                                       Prob > chi2     =     0.0000
     Log likelihood = -94.727259                       Pseudo R2       =     0.2431
```

hp2vacatn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0748804	.0361789	2.07	0.038	.003971	.1457898
radhlw2	.000021	.0067408	0.00	0.998	-.0131908	.0132328
ageXd2	-.0497686	.0503553	-0.99	0.323	-.1484632	.0489259
bf7m	.0001854	.0004234	0.44	0.661	-.0006444	.0010153
avgcumdosew2	4.201192	4.071901	1.03	0.302	-3.779588	12.18197
bf4m	-.1121478	.0674199	-1.66	0.096	-.2442883	.0199927
bf4mXd2	-.0946542	.0750285	-1.26	0.207	-.2417073	.0523988
bf7mXd2	.0002633	.0003512	0.75	0.453	-.0004251	.0009517
_cons	-4.20268	2.927797	-1.44	0.151	-9.941058	1.535697

Note: 1 failure and 0 successes completely determined.

```
1278 .
1279 .  scalar vactnModMw2 ="none"

1280 .
1281 . title4 "Trimmed Female model Wave 2 main effects dose-hp2vacatn model "
```

Trimmed Female model Wave 2 main effects dose-hp2vacatn model

```
1282 .  forvalues j = 2/2 {
  2.  local w2bf bf1 bf4 bf6 bf7 bf14 bf15 bf40
  3.
1283 .   xi: logistic hp2vacatn age  radhlw`j' avgcumdosew`j'   ///
>   deaw`j'  suchrw`j'   ///
>     if gender==2, coef difficult iterate(50)
  4.
1284 . }
```

Logistic regression

	Number of obs	=	363
	LR chi2(5)	=	70.03
	Prob > chi2	=	0.0000
Log likelihood = -132.50308	Pseudo R2	=	0.2090

hp2vacatn	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age	.0851818	.0154813	5.50	0.000	.054839	.1155246
radhlw2	.0170145	.0053804	3.16	0.002	.0064692	.0275599
avgcumdosew2	.0786711	.0879844	0.89	0.371	-.0937752	.2511173
deaw2	.201149	.1681372	1.20	0.232	-.1283938	.5306918
suchrw2	-.0020193	.0038609	-0.52	0.601	-.0095866	.005548
_cons	-7.431055	.9998597	-7.43	0.000	-9.390744	-5.471366

```
1285 .
1286 . sw, pr(.1): logit hp2vactn age radhlw2 avgcumdosew2 havmilsq ageXd2 radhlw2X
     > d2 if gender==2
                           begin with full model
     p = 0.7449 >= 0.1000  removing radhlw2Xd2
     p = 0.7297 >= 0.1000  removing havmilsq
     p = 0.4685 >= 0.1000  removing ageXd2
     p = 0.4486 >= 0.1000  removing avgcumdosew2

     Logistic regression                               Number of obs   =        363
                                                       LR chi2(2)      =      67.78
                                                       Prob > chi2     =     0.0000
     Log likelihood =   -133.624                       Pseudo R2       =     0.2023

     ------------------------------------------------------------------------------
         hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
              age |    .087459   .0153711     5.69   0.000     .0573321    .1175858
          radhlw2 |   .0183043   .0051588     3.55   0.000     .0081933    .0284153
            _cons |  -7.552753   .9504531    -7.95   0.000    -9.415607   -5.689899
     ------------------------------------------------------------------------------

1287 .
1288 .
1289 .
1290 . scalar SigDoseVactnMw2 = "no"

1291 . scalar MainEffVactnMw2 = "age radhlw2"

1292 . scalar VactnModMw2 = "none"

1293 .
1294 .  * summary of male moderating effects: no sign main dose effect in main effe
     > cts model
1295 .  *          no signif male moderators
1296 .  *          3 significant main effects in main effects model
1297 .
```

```
1298 .  * summary of female moderation main effects:  no signif main dose effect
1299 .
1300 .
1301 . scalar SigDoseVactnFw2 = "no"

1302 . scalar MainEffVactnFw2 = "age radhlw2 bf7m"

1303 .
1304 . cap gen suchrw2Xd2 = suchrw2*avgcumdosew2

1305 .
1306 .
1307 . scalar VacatnModFw2 = "none"

1308 . *xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
     > xxxx
1309 . cap gen hp2vactn = HP2vacatn

1310 . title4 "Male mediator tests for vacation plans impact of dose"
     ──────────────────────────────────────────────────────────────────────────────
     Male mediator tests for vacation plans impact of dose
     ──────────────────────────────────────────────────────────────────────────────


1311 . * for males
1312 .
1313 . * age is a mediator for males
1314 . glm age avgcumdosew2 if gender==1, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1330.6004

     Generalized linear models                          No. of obs      =       340
     Optimization     : ML                              Residual df     =       338
                                                        Scale parameter =  147.6853
     Deviance         =  49917.64009                    (1/df) Deviance =  147.6853
     Pearson          =  49917.64009                    (1/df) Pearson  =  147.6853

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =  7.838826
     Log likelihood   =   -1330.6004                    BIC             =  47947.46
```

```
-----------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
avgcumdosew2 |   .5832314   .2635871     2.21   0.027     .0666101    1.099853
       _cons |   48.62133   .7061562    68.85   0.000     47.23729    50.00537
-----------------------------------------------------------------------------
```

```
1315 . glm hp2vactn age  if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  230.5483
     Iteration 2:   deviance =  224.6254
     Iteration 3:   deviance =  224.4149
     Iteration 4:   deviance =  224.4147
     Iteration 5:   deviance =  224.4147

     Generalized linear models                          No. of obs      =       340
     Optimization     : MQL Fisher scoring              Residual df     =       338
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  224.4146771                    (1/df) Deviance =  .6639487
     Pearson          =  345.2370578                    (1/df) Pearson  =  1.021411

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1745.769
```

```
-----------------------------------------------------------------------------
             |                 EIM
    hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+---------------------------------------------------------------
         age |   .0377399   .0063833     5.91   0.000     .0252289    .0502509
       _cons |  -3.150096   .3549593    -8.87   0.000    -3.845803   -2.454388
-----------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1316 .
```

```
1317 .
1318 . des illw2

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
illw2           double %8.0g                  Total number of illnesses
                                                experienced in time period
                                                1987-1996

1319 . glm illw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -303.59609

Generalized linear models                          No. of obs      =       340
Optimization     : ML                              Residual df     =       338
                                                   Scale parameter =  .3512988
Deviance         =  118.7390083                    (1/df) Deviance =  .3512988
Pearson          =  118.7390083                    (1/df) Pearson  =  .3512988

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  1.797624
Log likelihood   = -303.5960853                    BIC             = -1851.445

------------------------------------------------------------------------------
             |                 OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .0085423   .0128556     0.66   0.506    -.0166543    .0337389
       _cons |   .2741359   .0344406     7.96   0.000     .2066336    .3416382
------------------------------------------------------------------------------

1320 . glm hp2vactn illw2 if gender==1, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =  246.5506
Iteration 2:   deviance =  245.3093
Iteration 3:   deviance =  245.3029
Iteration 4:   deviance =  245.3029
Iteration 5:   deviance =  245.3029

Generalized linear models                          No. of obs      =       340
Optimization     : MQL Fisher scoring              Residual df     =       338
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  245.3029322                    (1/df) Deviance =  .7257483
Pearson          =  335.4909761                    (1/df) Pearson  =  .9925769
```

```
Variance function: V(u) = u*(1-u)                 [Bernoulli]
Link function    : g(u) = invnorm(u)              [Probit]

                                                  BIC             = -1724.881

------------------------------------------------------------------------------
             |                 EIM
    hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       illw2 |   .3031606   .1114242     2.72   0.007     .0847731    .5215481
       _cons |  -1.277579   .0863769   -14.79   0.000    -1.446875   -1.108284
------------------------------------------------------------------------------
(Standard errors scaled using square root of deviance-based dispersion.)

1321 .
1322 . des radhlw2

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
radhlw2         double %8.0g                  Self-perceived Chornobyl health
                                                threat in Wave 2

1323 . glm radhlw2 avgcumdosew2 if gender==1, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1693.4076

Generalized linear models                         No. of obs      =        340
Optimization     : ML                             Residual df     =        338
                                                  Scale parameter =   1247.933
Deviance         =  421801.4584                   (1/df) Deviance =   1247.933
Pearson          =  421801.4584                   (1/df) Pearson  =   1247.933

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   9.972986
Log likelihood   = -1693.407647                   BIC             =   419831.3

------------------------------------------------------------------------------
             |                 OIM
     radhlw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.220373    .766216     1.59   0.111    -.2813831    2.722128
       _cons |   45.63198   2.052711    22.23   0.000     41.60874    49.65522
------------------------------------------------------------------------------
```

```
1324 . glm hp2vactn radhlw2 if gender==1, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  234.5448
     Iteration 2:   deviance =  229.6041
     Iteration 3:   deviance =  229.4465
     Iteration 4:   deviance =  229.4462
     Iteration 5:   deviance =  229.4462

     Generalized linear models                          No. of obs      =       340
     Optimization     : MQL Fisher scoring              Residual df     =       338
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  229.4462113                    (1/df) Deviance =  .6788349
     Pearson          =  340.4683102                    (1/df) Pearson  =  1.007303

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1740.737

     ------------------------------------------------------------------------------
                  |                 EIM
         hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
          radhlw2 |   .0116586   .0021811     5.35   0.000     .0073837    .0159334
            _cons |  -1.817407   .1519393   -11.96   0.000    -2.115203   -1.519612
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1325 .
1326 . * for females
1327 .
1328 . * age is a mediator for females
1329 . glm age avgcumdosew2 if gender==2, fam(gaus) link(identity)

     Iteration 0:   log likelihood = -1406.9403

     Generalized linear models                          No. of obs      =       363
     Optimization     : ML                              Residual df     =       361
                                                        Scale parameter =  136.9184
     Deviance         =  49427.52828                    (1/df) Deviance =  136.9184
     Pearson          =  49427.52828                    (1/df) Pearson  =  136.9184

     Variance function: V(u) = 1                        [Gaussian]
     Link function    : g(u) = u                        [Identity]

                                                        AIC             =  7.762756
     Log likelihood   = -1406.940271                    BIC             =  47299.65
```

```
------------------------------------------------------------------------------
             |                 OIM
         age |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   1.502324   .4454009     3.37   0.001     .6293547    2.375294
       _cons |   48.86944   .7323225    66.73   0.000     47.43412    50.30477
------------------------------------------------------------------------------
```

```
1330 . glm hp2vactn age  if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  288.2228
     Iteration 2:   deviance =  282.9212
     Iteration 3:   deviance =     282.8
     Iteration 4:   deviance =     282.8
     Iteration 5:   deviance =     282.8

     Generalized linear models                          No. of obs      =       363
     Optimization     : MQL Fisher scoring              Residual df     =       361
                        (IRLS EIM)                      Scale parameter =         1
     Deviance         =  282.7999835                    (1/df) Deviance =  .7833795
     Pearson          =  396.9154874                    (1/df) Pearson  =  1.099489

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             = -1845.079

     ------------------------------------------------------------------------------
                  |                 EIM
         hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
              age |   .0510238   .0068535     7.44   0.000     .0375912    .0644564
            _cons |  -3.660305   .3855366    -9.49   0.000    -4.415943   -2.904667
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1331 .
```

```
1332 . * illness is a mediating effect for females = > vacatn
1333 . des illw2

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
illw2           double %8.0g                  Total number of illnesses
                                                experienced in time period
                                                1987-1996

1334 . glm illw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -463.51524

Generalized linear models                          No. of obs      =       363
Optimization     : ML                              Residual df     =       361
                                                   Scale parameter =   .756881
Deviance         =  273.2340487                    (1/df) Deviance =   .756881
Pearson          =  273.2340487                    (1/df) Pearson  =   .756881

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =  2.564822
Log likelihood   = -463.5152411                    BIC             = -1854.645

------------------------------------------------------------------------------
             |                 OIM
       illw2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
avgcumdosew2 |   .1249912   .0331157     3.77   0.000     .0600856    .1898968
       _cons |    .301285   .0544484     5.53   0.000      .194568    .4080019
------------------------------------------------------------------------------

1335 . glm hp2vactn illw2 if gender==2, fam(bin) irls scale(dev) link(probit)

Iteration 1:   deviance =   329.874
Iteration 2:   deviance =  329.8007
Iteration 3:   deviance =  329.8005
Iteration 4:   deviance =  329.8005

Generalized linear models                          No. of obs      =       363
Optimization     : MQL Fisher scoring              Residual df     =       361
                   (IRLS EIM)                      Scale parameter =         1
Deviance         =  329.8005369                    (1/df) Deviance =  .9135749
Pearson          =  363.0908863                    (1/df) Pearson  =  1.005792
```

```
Variance function: V(u) = u*(1-u)                 [Bernoulli]
Link function    : g(u) = invnorm(u)              [Probit]

                                                  BIC             = -1798.079
```

hp2vactn	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
illw2	.1861547	.0776301	2.40	0.016	.0340026	.3383068
_cons	-1.027515	.0837109	-12.27	0.000	-1.191586	-.8634451

(Standard errors scaled using square root of deviance-based dispersion.)

```
1336 .
1337 . * radhlw2 is a mediating effect for females => vactn
1338 . des radhlw2
```

variable name	storage type	display format	value label	variable label
radhlw2	double	%8.0g		**Self-perceived Chornobyl health threat in Wave 2**

```
1339 . glm radhlw2 avgcumdosew2 if gender==2, fam(gaus) link(identity)

Iteration 0:   log likelihood = -1791.2233

Generalized linear models                         No. of obs      =        363
Optimization     : ML                             Residual df     =        361
                                                  Scale parameter =   1137.567
Deviance         =  410661.5604                   (1/df) Deviance =   1137.567
Pearson          =  410661.5604                   (1/df) Pearson  =   1137.567

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC             =   9.880018
Log likelihood   = -1791.223306                   BIC             =   408533.7
```

radhlw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	3.302288	1.283833	2.57	0.010	.7860214	5.818555
_cons	56.95167	2.110863	26.98	0.000	52.81445	61.08888

```
1340 . glm hp2vactn radhlw2 if gender==2, fam(bin) irls scale(dev) link(probit)

     Iteration 1:   deviance =  310.7426
     Iteration 2:   deviance =  307.9144
     Iteration 3:   deviance =   307.878
     Iteration 4:   deviance =   307.878
     Iteration 5:   deviance =   307.878

     Generalized linear models                          No. of obs      =        363
     Optimization     : MQL Fisher scoring              Residual df     =        361
                        (IRLS EIM)                      Scale parameter =          1
     Deviance         =  307.8780006                    (1/df) Deviance =   .8528476
     Pearson          =   369.926962                    (1/df) Pearson  =   1.024728

     Variance function: V(u) = u*(1-u)                  [Bernoulli]
     Link function    : g(u) = invnorm(u)               [Probit]

                                                        BIC             =  -1820.001

     ------------------------------------------------------------------------------
                  |                 EIM
         hp2vactn |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
     -------------+----------------------------------------------------------------
          radhlw2 |   .0127779   .0023866     5.35   0.000     .0081002    .0174555
            _cons |  -1.793767   .1848064    -9.71   0.000     -2.15598   -1.431553
     ------------------------------------------------------------------------------
     (Standard errors scaled using square root of deviance-based dispersion.)

1341 .
1342 .  * summary of male moderating effects: no sign main dose effect in main effe
     > cts model
1343 .  *         no signif male moderators
1344 .  *         3 significant main effects in main effects model
1345 . * summary omnibus model
1346 . des radhlw2

                   storage  display     value
     variable name   type   format      label      variable label
     ------------------------------------------------------------------------------
     radhlw2         double %8.0g                  Self-perceived Chornobyl health
                                                     threat in Wave 2
```

1347 . glm radhlw2 avgcumdosew2 illw2 if gender==2, fam(gaus) link(identity)

```
Iteration 0:   log likelihood = -1788.7036

Generalized linear models                          No. of obs      =        363
Optimization     : ML                              Residual df     =        360
                                                   Scale parameter =       1125
Deviance         =  404999.9575                    (1/df) Deviance =       1125
Pearson          =  404999.9575                    (1/df) Pearson  =       1125

Variance function: V(u) = 1                        [Gaussian]
Link function    : g(u) = u                        [Identity]

                                                   AIC             =   9.871645
Log likelihood   =  -1788.70364                    BIC             =     402878
```

radhlw2	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
avgcumdosew2	2.733328	1.30167	2.10	0.036	.1821022	5.284554
illw2	4.552	2.029125	2.24	0.025	.5749882	8.529013
_cons	55.58022	2.186381	25.42	0.000	51.29499	59.86544

1348 . glm hp2vactn radhlw2 illw2 avgcumdosew2 if gender==2, fam(bin) irls scale(de
> v) link(probit)

```
Iteration 1:   deviance =  306.8282
Iteration 2:   deviance =  303.8899
Iteration 3:   deviance =  303.8448
Iteration 4:   deviance =  303.8448
Iteration 5:   deviance =  303.8448

Generalized linear models                          No. of obs      =        363
Optimization     : MQL Fisher scoring              Residual df     =        359
                   (IRLS EIM)                      Scale parameter =          1
Deviance         =  303.8447923                    (1/df) Deviance =   .8463643
Pearson          =  365.1970108                    (1/df) Pearson  =   1.017262

Variance function: V(u) = u*(1-u)                  [Bernoulli]
Link function    : g(u) = invnorm(u)               [Probit]

                                                   BIC             =  -1812.246
```

hp2vactn	Coef.	EIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
radhlw2	**.0120672**	**.0024098**	**5.01**	**0.000**	**.007344**	**.0167903**
illw2	**.1173614**	**.0786613**	**1.49**	**0.136**	**-.036812**	**.2715347**
avgcumdosew2	**.0586976**	**.047942**	**1.22**	**0.221**	**-.035267**	**.1526623**
_cons	**-1.859623**	**.1874026**	**-9.92**	**0.000**	**-2.226926**	**-1.492321**

(Standard errors scaled using square root of deviance-based dispersion.)

```
1349 .
1350 .
1351 . scalar VactnMedMw2 = "age"

1352 . scalar VactnMedFw2 = "age illw2 radhlw2"

1353 .
1354 . *xx summary of moderator effects for females:
1355 .     * no signif main dose effect
1356 .     * 3 signif main effects in main effect model
1357 .     * 1 moderator: deaw2Xd2
1358 . title4 "7. Summary Matrix construction of dose - vacatn plans impact"
```

7. Summary Matrix construction of dose - vacatn plans impact

```
1359 .
1360 .   matrix define  vactnMw2 = J(1,8, 0)

1361 .         matrix define  vactnFw2 = J(1,8, 0)

1362 . matrix colnames  vactnMw2=  hypnum ptnum wave gender medsig numMAsig numMods
     > ig numMed

1363 . matrix colnames  vactnFw2=  hypnum ptnum wave gender medsig numMAsig numMods
     > ig numMed
```

```
1364 .     matrix define  vactnMw2= (1, 2, 3, 1, 0, 2, 0, 1 )

1365 .         matrix define  vactnFw2= (1, 2, 3, 2, 0, 3, 0, 3 )

1366 .         matrix rowname  vactnMw2 =  vactnM

1367 .         matrix rowname  vactnFw2 =  vactnF

1368 .         matlist  vactnMw2

                 |        c1          c2          c3          c4          c5          c
     > 6          c7          c8
     ------------+--------------------------------------------------------------------
     > ------------------------
          vactnM |         1           2           3           1           0
     > 2           0           1

1369 .         matlist  vactnFw2

                 |        c1          c2          c3          c4          c5          c
     > 6          c7          c8
     ------------+--------------------------------------------------------------------
     > ------------------------
          vactnF |         1           2           3           2           0
     > 3           0           3

1370 .         matrix define H1pt2w2 = (  wkMw2 \  wkFw2 \  hmcrMw2 \  hmcrFw2 \  s
     > pMw2 ///
     >            \  spFw2 \ sxlifeMw2 \ sxlifeFw2 \ inthbMw2 \  inthbFw2 \  vactn
     > Mw2 \  vactnFw2 )

1371 .
1372 .         matlist H1pt2w2

                 |        c1          c2          c3          c4          c5          c
     > 6          c7          c8
     ------------+--------------------------------------------------------------------
     > ------------------------
              r1 |         1           2           2           1           0
     > 2           0           2
              r1 |         1           2           2           2           0
     > 1           0           2
              r1 |         1           2           3           1           0
     > 1           0           1
              r1 |         1           2           3           2           1
     > 1           0           2
            spMw2 |        1           2           3           1           0
     > 4           0           1
            spFw2 |        1           2           3           2           1
```

```
> 5          0          3
   sxlifeMw2 |          1          2          3          1          0
> 6          0          1
   sxlifeFw2 |          1          2          3          2          0
> 4          0          5
      inthbM |          1          2          3          1          0
> 3          0          1
     inthobF |          1          2          3          2          0
> 3          0          4
      vactnM |          1          2          3          1          0
> 2          0          1
      vactnF |          1          2          3          2          0
> 3          0          3

1373 .     matrix colnames H1pt2w2 =  hypnum ptnum wave gender medsig numMAsig numM
     > odsig numMed

1374 .     matrix rownames H1pt2w2 =    wkMw2  wkFw2  hmcrMw2  hmcrFw2  socprbMw2
     > socprbFw2  inthbMw2  inthbFw2  vactnMw2  vacatnFw2

1375 .     matlist H1pt2w2

             |     hypnum      ptnum       wave     gender     medsig   numMAsi
> g  numModsig     numMed
-------------+---------------------------------------------------------------------
> ------------------------
       wkMw2 |          1          2          2          1          0
> 2          0          2
       wkFw2 |          1          2          2          2          0
> 1          0          2
     hmcrMw2 |          1          2          3          1          0
> 1          0          1
     hmcrFw2 |          1          2          3          2          1
> 1          0          2
   socprbMw2 |          1          2          3          1          0
> 4          0          1
   socprbFw2 |          1          2          3          2          1
> 5          0          3
    inthbMw2 |          1          2          3          1          0
> 6          0          1
    inthbFw2 |          1          2          3          2          0
> 4          0          5
    vactnMw2 |          1          2          3          1          0
> 3          0          1
   vacatnFw2 |          1          2          3          2          0
> 3          0          4
   vacatnFw2 |          1          2          3          1          0
> 2          0          1
   vacatnFw2 |          1          2          3          2          0
```

```
     > 3          0          3

1376 .     scalar list
     VactnMedMw2 = age
     MainEffVactnMw2 = age radhlw2
     sxlifeMedMw2 = age illw2
     SigDoseSxlifeFw2 = no
     MainEffsxlifeFw2 = age radhlw2 bf4 bf4m
     MainEffPrbsocMw2 = age radhlw2 shjobw2
     MainEffhmcrFw2 = age
     hmcrMedFw2 = age bf4
     MainEffwkFw2 = age
     MainEffwkMw2 = age
     inthobMedMw2 = age
      inthobMw2 = age
     PrbfmhmModMw2 = none
     MainEffProbSocFw2 = age radhlw2 avgcumdosew2 bf4
     hmcrModMw2 = none
     MainEffhmcrMw2 = age
       wkMedFw2 = age b4
       wkMedMw2 = age bf4
     MainEffsxlifeMw2 = age bf4 bf40 shjobw2 shrelaw2 radhlw2
     MainEffPrbfmhmMw2 = bf4 bf6 bf7
     ProbsocMedFw2 = age bf4 radhlw2
     hmcareMedFw2 = age bf4
      WkhmcrMw2 = age b4
     MainEffhmcrw2 = age
     hmcrModFw2 = none
     SigDoseHmcrFw2 = yes
     NumhmcrModMw2 = none
     SigDosehmcrMw2 = no
     SigdosehmcrFw2 = yes
     hmcrMedMw2 = age ageXillw2
     SigDosehmcrFw2 = no
     MainEffhmcareMw2 = age
       WkMedMw2 = age ageXillw2
       wkMedFw3 = radhlw3 age ageXillw3 bf40 bf4m bf1
     VactnMedFw2 = age illw2 radhlw2
     VacatnModFw2 = none
     MainEffVactnFw2 = age radhlw2 bf7m
     SigDoseVactnFw2 = no
     VactnModMw2 = none
     vactnModMw2 = none
     SigDoseVactnMw2 = no
     inthobMedFw2 = age bf4 illw2 bf4m
     InthbModFw2 = none
     MainEffInthbFw2 = age radhlw2 bf4
     SigdoseInthbFw2 = no
     InthbModMw2 = none
```

```
MainEffInthbMw2 = age radhlw2 shfamw2
SigDoseInthbMw2 = no
MainEffMw2 = radhlw2 bf4 bf40
SigdoseMEinthob = no
sxlifeMedFw2 = age illw2 radhlw2 bf4 bf4m
SxLifeModFw2 = no
sxlifeModFw2 = none
sxlifeModMw2 = none
SigDosesxlifeMw2 = no
PrbfmhmMedFw2 = age bf4
PrbfmhmMedMw2 = age
PrbfmhmModFw2 = none
MainEffPrbfmhmFw2 = age bf4 bf40
SigDosePrbfmhmFw2 = no
PrbfmhmModw2 = none
SigDosePrbfmhmMw2 = no
SigDosePrbfhmMw2 = no
MainEffPrbfhmMw2 = bf4 bf6 bf7
ProbsocMedMw2 = age
ProbsocModFw2 = none
SigDoseProbsocFw2 = yes
ProbSocModMw2 = none
SigDoseProbsocMw2 = no
PrbsocModMw2 = none
SigdoseMw2 = none
hmcareMedMw2 = age
hmcareModFw2 = none
MainEffhmcarew2 = age
SigdoseHmcareFw2 = no
hmcareModMw2 = none
SigDoseHmcareMw2 = no
NameMedMw2 = age ageXillw2
 NumModMw2 = none
SigDosehmcareMw2 = no
SigDoseWKMw2 = no
  WkMedFw2 = age bf4
  WkModFw2 = none
  WKModMw2 = none
SigDoseWkMw2 = no
SigDoseWkFw2 = no
SigDoseFw2 = no
  wkModFw2 = none
  wkModMw2 = none
VactnMedFw3 = age illw3 radhlw3
VactnMedMw3 = age illw3
VacatnModFw3 = none
MainEffVactnFw3 = age radhlw3 deaw3
SigDoseVactnFw3 = no
vactnModMw3 = none
```

MainEffVactnMw3 = **age bf7m radhlw3**
SigDoseVactnMw3 = **no**
sxLifeMedFw3 = **age bf4 bf4m**
sxLifeMedMw3 = **age illw3**
InthbModFw3 = **none**
MainEffInthbFw3 = **age radhlw3 bf4**
SigdoseInthbFw3 = **no**
  InthbMw3 = **none**
MainEffInthbMw3 = **age radhlw3 shfamw3**
SigDoseInthbMw3 = **no**
sxlifeMedFw3 = **age illw3 radhlw3 bf4 bf4m**
sxlifeMedMw3 = **age illw3**
sxlifeModFw3 = **none**
MainEffsxlifeFw3 = **age radhlw3 bf4 bf4m shrelaw3 shfamw3**
SigDoseSxlifeFw3 = **no**
sxlifeModMw3 = **none**
SigDosesxlifeMw3 = **no**
MainEffsxlifeMw3 = **age bf4 illw3 radhlw3**
PrbfmhmMedFw3 = **age bf4**
PrbfmhmMedMw3 = **age**
PrbfmhmModFw3 = **none**
MainEffPrbfmhmFw3 = **age bf4 bf40**
SigDosePrbfmhmFw3 = **no**
PrbfmhmModw3 = **none**
SigDosePrbfmhmMw3 = **no**
SigDosePrbfhmMw3 = **no**
MainEffPrbfhmMw3 = **bf1 bf4 dvcew3 bf7m**
ProbsocMedFw3 = **age radhlw3**
ProbsocMedMw3 = **age**
ProbsocModFw3 = **none**
MainEffProbSocFw3 = **age radhlw3 illw3 Shrelaw3 avgcumodsew3**
SigDoseProbsocFw3 = **yes**
ProbSocModMw3 = **none**
SigDoseProbsocMw3 = **no**
MainEffPrbsocMw3 = **age radhlw3 shjobw3**
hmcareMedFw3 = **age illw3**
hmcareMedMw3 = **age illw3**
hmcareModFw3 = **none**
SigdoseHmcareFw3 = **no**
hmcareModMw3 = **none**
MainEffhmcareMw3 = **none**
SigDoseHmcareMw3 = **no**
  wkMedMw3 = **bf8 age illw3 ageXillw3**
  wkModFw3 = **none**
  wkModMw3 = **none**
MainEffwkFw3 = **age**
MainEffwkMw3 = **workM: age bf8 illw3 shjobw3**
SigDoseWKMw3 = **no**
SigDoseWkFw3 = **no**

```
1377 . pwd
     /Users/robertyaffee/Documents/data/research/chwk/phase3/Htests/h1tests/h1pt2

1378 . di c(filename)
     chwide16june2012.dta

1379 .
1380 . sjlog close, replace
```