```
      name:  <unnamed>
       log:  /Users/robinson.1012/Dropbox/Research/Matrilineality/Submissions/
> BJPS/Replication/DataverseFiles/RG_Matlin_XNat_log.smcl
  log type:  smcl
 opened on:  11 Dec 2018, 10:15:13

 1 .
 2 . set more off

 3 . use RG_Matlin_XNat.dta

 4 .
 5 . *** Create Macros for DVs ***
 6 .
 7 . global dv engindexA polindexA civindexA

 8 . global dv_eng z_polinterest z_poldiscuss z_polunderstand

 9 . global dv_politic z_voted z_contactpol z_protest z_rally z_persuade z_campai
   > gn

10 . global dv_civic z_meeting z_commorg z_leader z_colaction

11 . global countries country1-country25

12 .
13 .
14 . ******************************
15 . ***** Main Regression DiD *****
16 . ******************************
17 .
18 . set more off

19 . foreach d in  dv  dv_eng dv_politic dv_civic   {
     2.
20 . foreach y in $`d' {
     3. local vtext : variable label `y'
     4. xtmixed `y' i.female##i.matlin  i.country || egroup:
     5. estimates store `y'
     6. local c : di %4.3f _b[1.female#1.matlin]
     7. matrix table=r(table)
     8. local p= table[4,8]
     9. local p: di %4.3f `p'
    10.
```

```
21 . * predicted probabilities
22 . margins, by( matlin female) atmeans vsquish
    11. marginsplot, plotdimension(female) ///
   >         title (`"`vtext'"', color(black) size(medium)) ytitle("") xtitle("")
   >  ///estt
   >         plot1opts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bl
   > ack) msiz(0))   ///
   >         plot2opts(msymbol(S) mcolor(gs10) lcolor(gs10) ) ci2opts(lcolor(gs10
   > ) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))  ///
   >         xscale(range(-0.5 1.5)) xlabel(0 1, labs(small)) xsize(1) ysize(1.5)
   >  ///
   >         legend (order (1 "Men" 2 "Women") region(lcolor(white)) c(2)) ///
   >         note("Diff-in-Diff: `c', p=`p'", ring(0) position(2)) /// //
   >         name(`y'_pp, replace) nodraw
    12.
23 . * marginal effects
24 . margins, dydx(female) by(matlin) atmeans vsquish
    13. marginsplot,  ///
   >         title (`"`vtext'"', color(black) size(medium)) ytitle("") xtitle("")
   >  ///estt
   >         plotopts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bla
   > ck) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))  ///
   >         xscale(range(-0.5 1.5)) xlabel(0 1, labs(small)) xsize(1) ysize(1.5)
   >  ///
   >         legend(off)   ///
   >         note("Diff-in-Diff: `c', p=`p'", ring(0) position(2)) ///
   >         name(`y', replace) nodraw
    14. }
    15.
25 . * Figure 2
26 . graph combine $`d', graphregion(fcolor(white) ilcolor(white) lcolor(white))
   > xcommon ycommon ///
   >         l1title("Marginal Effect of Female", size(medium)) ///
   >         cols(1) name(graph, replace)
    16. graph display graph, xsize(5) ysize(10)
    17. *graph export "Figures/`d'_matlin_me.pdf", replace
```

```
27 . }

   Performing EM optimization:

   Performing gradient-based optimization:

   Iteration 0:   log likelihood = -38093.345
   Iteration 1:   log likelihood = -38093.345

   Computing standard errors:

   Mixed-effects ML regression                     Number of obs     =     37,198
   Group variable: egroup                          Number of groups  =        383

                                                   Obs per group:
                                                                 min =          1
                                                                 avg =       97.1
                                                                 max =      1,754

                                                   Wald chi2(28)     =    1461.36
   Log likelihood = -38093.345                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> ------
          engindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> ------
             female |
            Female  |  -.2432145   .0075033   -32.41   0.000    -.2579206   -.
> 2285083
                    |
             matlin |
       Matrilineal  |  -.0426435   .0312739    -1.36   0.173    -.1039392    .
> 0186522
                    |
      female#matlin |
Female#Matrilineal  |   .0827797    .020213     4.10   0.000      .043163    .
> 1223964
                    |
            country |
           Botswana |   .1059528   .0542607     1.95   0.051    -.0003963    .
> 2123019
       Burkina Faso |  -.0207186   .0545569    -0.38   0.704    -.1276482
> .086211
              Ghana |   .0288572    .048117     0.60   0.549    -.0654504    .
> 1231648
              Kenya |   .0589902   .0482206     1.22   0.221    -.0355203    .
> 1535008
```

```
          Lesotho |   .3399905    .052074     6.53   0.000     .2379274    .
> 4420536
          Liberia |  -.0031402   .0514558    -0.06   0.951    -.1039918    .
> 0977114
       Madagascar |  -.3081583   .0571161    -5.40   0.000    -.4201038   -.
> 1962128
           Malawi |   .1892527   .0522106     3.62   0.000     .0869218    .
> 2915836
             Mali |   .0569282   .0513982     1.11   0.268    -.0438105    .
> 1576668
       Mozambique |   .1279675   .0485586     2.64   0.008     .0327943    .
> 2231407
          Namibia |   .1074287   .0666718     1.61   0.107    -.0232457
> .238103
          Nigeria |   .2390482   .0400639     5.97   0.000     .1605243    .
> 3175721
          Senegal |   .3244411   .0598747     5.42   0.000     .2070889    .
> 4417934
     South Africa |   .1570394   .0543987     2.89   0.004     .0504199
> .263659
         Tanzania |   .2164167   .0448626     4.82   0.000     .1284876    .
> 3043458
           Uganda |   .0756961   .0466231     1.62   0.104    -.0156836    .
> 1670757
           Zambia |   .1224671   .0532723     2.30   0.022     .0180554    .
> 2268789
         Zimbabwe |    .237362   .0495223     4.79   0.000        .1403
> .334424
     Sierra Leone |   .1361312   .0553435     2.46   0.014        .02766   .
> 2446024
            Niger |   .2521874   .0568963     4.43   0.000     .1406727    .
> 3637021
             Togo |  -.0450827   .0528415    -0.85   0.394    -.1486501    .
> 0584847
          Burundi |  -.0892622   .0848518    -1.05   0.293    -.2555686    .
> 0770443
         Cameroon |   .1690358   .0511052     3.31   0.001     .0688715    .
> 2692002
                  |  -.1157846   .0527678    -2.19   0.028    -.2192075   -.
> 0123617
           Guinea |   .0777916    .050431     1.54   0.123    -.0210513    .
> 1766344
                  |
            _cons |  -.0045372   .0374834    -0.12   0.904    -.0780034
> .068929
------------------+------------------------------------------------------------
> ------
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.101106**	**.007292**	**.087778**	**.1164576**
sd(Residual)	**.6708977**	**.0024708**	**.6660724**	**.675758**

LR test vs. linear model: chibar2(01) = **369.95** Prob >= chibar2 = **0.0000**

Adjusted predictions Number of obs = **37,198**

Expression : **Linear prediction, fixed portion, predict()**
over : **matlin female**
at : 0.matlin#0.female

female	=	**0**	
matlin	=	**0**	
1.country	=	**.0336412**	(mean)
2.country	=	**.0231557**	(mean)
3.country	=	**.0344526**	(mean)
5.country	=	**.0727125**	(mean)
6.country	=	**.0735239**	(mean)
7.country	=	**.0364499**	(mean)
8.country	=	**.0340157**	(mean)
9.country	=	**.0267757**	(mean)
10.country	=	**.0175384**	(mean)
11.country	=	**.0363251**	(mean)
12.country	=	**.0179129**	(mean)
13.country	=	**.0089252**	(mean)
14.country	=	**.0696542**	(mean)
15.country	=	**.0366371**	(mean)
16.country	=	**.0441892**	(mean)
17.country	=	**.0494944**	(mean)
18.country	=	**.0725253**	(mean)
19.country	=	**.0176632**	(mean)
20.country	=	**.0710273**	(mean)
22.country	=	**.0321433**	(mean)
23.country	=	**.0338285**	(mean)
24.country	=	**.0292723**	(mean)
25.country	=	**.0340157**	(mean)
26.country	=	**.0210336**	(mean)
27.country	=	**.0361378**	(mean)
28.country	=	**.0369492**	(mean)
0.matlin#1.female			
female	=	**1**	
matlin	=	**0**	
1.country	=	**.0333936**	(mean)
2.country	=	**.0241106**	(mean)
3.country	=	**.0348888**	(mean)

```
        5.country       =     .0720204 (mean)
        6.country       =     .0732665 (mean)
        7.country       =     .0364463 (mean)
        8.country       =     .0347642 (mean)
        9.country       =     .0259174 (mean)
        10.country      =     .0186904 (mean)
        11.country      =     .0362594 (mean)
        12.country      =     .0176313 (mean)
        13.country      =     .0102174 (mean)
        14.country      =     .0685939 (mean)
        15.country      =     .0361971 (mean)
        16.country      =     .0452931 (mean)
        17.country      =      .046913 (mean)
        18.country      =     .0726434 (mean)
        19.country      =     .0190642 (mean)
        20.country      =     .0710236 (mean)
        22.country      =     .0311507 (mean)
        23.country      =     .0337051 (mean)
        24.country      =       .03059 (mean)
        25.country      =     .0328328 (mean)
        26.country      =     .0219301 (mean)
        27.country      =      .035761 (mean)
        28.country      =     .0366955 (mean)
1.matlin#0.female
        female          =            0
        matlin          =            1
        3.country       =     .0035322 (mean)
        10.country      =     .3559655 (mean)
        12.country      =     .3163265 (mean)
        13.country      =     .1236264 (mean)
        17.country      =     .0784929 (mean)
        19.country      =     .0816327 (mean)
        20.country      =     .0125589 (mean)
        22.country      =     .0062794 (mean)
        23.country      =     .0215856 (mean)
1.matlin#1.female
        female          =            1
        matlin          =            1
        3.country       =     .0031044 (mean)
        10.country      =     .3399302 (mean)
        12.country      =     .3220799 (mean)
        13.country      =     .1218471 (mean)
        17.country      =      .088863 (mean)
        19.country      =     .0811021 (mean)
        20.country      =     .0120295 (mean)
        22.country      =     .0085371 (mean)
        23.country      =     .0225068 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .0978075   .0093691    10.44   0.000     .0794444    .
> 1161706
 Patrilineal/Mixed #|
            Female  |  -.1453185   .0093514   -15.54   0.000    -.1636469   -.
> 1269901
  Matrilineal#Male  |    .110138   .0260362     4.23   0.000     .0591079    .
> 1611681
Matrilineal#Female  |  -.0501842   .0257136    -1.95   0.051     -.100582    .
> 0002135
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,198

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4995479 (mean)
                   1.female        =    .5004521 (mean)
                   matlin          =           0
                   1.country       =    .0335173 (mean)
                   2.country       =    .0236336 (mean)
                   3.country       =    .0346709 (mean)
                   5.country       =    .0723662 (mean)
                   6.country       =    .0733951 (mean)
                   7.country       =    .0364481 (mean)
                   8.country       =    .0343903 (mean)
                   9.country       =    .0263461 (mean)
                   10.country      =    .0181149 (mean)
                   11.country      =    .0362922 (mean)
                   12.country      =     .017772 (mean)
                   13.country      =    .0095719 (mean)
                   14.country      =    .0691236 (mean)
                   15.country      =    .0364169 (mean)
                   16.country      =    .0447417 (mean)
                   17.country      =    .0482025 (mean)
                   18.country      =    .0725844 (mean)
```

```
                    19.country      =    .0183644 (mean)
                    20.country      =    .0710255 (mean)
                    22.country      =    .0316466 (mean)
                    23.country      =    .0337667 (mean)
                    24.country      =    .0299317 (mean)
                    25.country      =    .0334238 (mean)
                    26.country      =    .0214822 (mean)
                    27.country      =    .0359492 (mean)
                    28.country      =    .0368222 (mean)
                1.matlin
                    0.female        =    .4971707 (mean)
                    1.female        =    .5028293 (mean)
                    matlin          =           1
                    3.country       =    .0033171 (mean)
                    10.country      =    .3479024 (mean)
                    12.country      =    .3192195 (mean)
                    13.country      =    .1227317 (mean)
                    17.country      =    .0837073 (mean)
                    19.country      =    .0813659 (mean)
                    20.country      =    .0122927 (mean)
                    22.country      =    .0074146 (mean)
                    23.country      =    .0220488 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2432145   .0075033   -32.41   0.000    -.2579206   -.2
> 285083
      Matrilineal   |  -.1604347   .0187684    -8.55   0.000    -.1972201   -.1
> 236494
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood =  -35948.72
Iteration 1:   log likelihood =  -35948.72
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,198
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       97.1
                                                              max =      1,754

                                                Wald chi2(28)     =    1771.13
Log likelihood = -35948.72                      Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          polindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |  -.2409962   .0070799   -34.04   0.000    -.2548726   -.
> 2271199
                    |
             matlin |
         Matrilineal |  -.0832786   .0313591    -2.66   0.008    -.1447413   -.
> 0218159
                    |
      female#matlin |
Female#Matrilineal |   .0600299   .0190717     3.15   0.002     .0226501    .
> 0974098
                    |
            country |
           Botswana |  -.2128145   .0539263    -3.95   0.000    -.3185082   -.
> 1071208
       Burkina Faso |  -.1983515   .0541137    -3.67   0.000    -.3044124   -.
> 0922906
              Ghana |  -.3433204   .0475067    -7.23   0.000    -.4364318   -.
> 2502089
              Kenya |  -.1361104   .0480345    -2.83   0.005    -.2302562   -.
> 0419645
            Lesotho |  -.1797011   .0518482    -3.47   0.001    -.2813217   -.
> 0780805
            Liberia |   .0406034   .0511682     0.79   0.427    -.0596845    .
> 1408913
         Madagascar |  -.5682817   .0569526    -9.98   0.000    -.6799068   -.
> 4566566
             Malawi |   .0482848   .0515766     0.94   0.349    -.0528034    .
> 1493731
               Mali |  -.2344975   .0508042    -4.62   0.000     -.334072   -.
```

```
> 1349231
       Mozambique |  -.1295545   .0479379    -2.70   0.007    -.2235111   -.
> 0355979
          Namibia |  -.3490652   .0669932    -5.21   0.000    -.4803695   -.
> 2177608
          Nigeria |  -.3480901   .0388688    -8.96   0.000    -.4242716   -.
> 2719086
          Senegal |   .0458614   .0601601     0.76   0.446    -.0720502    .
> 1637731
     South Africa |  -.3864098   .0544212    -7.10   0.000    -.4930734   -.
> 2797461
         Tanzania |  -.0063891   .0443497    -0.14   0.885     -.093313    .
> 0805347
           Uganda |   .0657007   .0463282     1.42   0.156    -.0251009    .
> 1565024
           Zambia |  -.3058515   .0526147    -5.81   0.000    -.4089745   -.
> 2027285
         Zimbabwe |   -.186449   .0490787    -3.80   0.000    -.2826415   -.
> 0902565
     Sierra Leone |  -.0042388   .0550149    -0.08   0.939     -.112066    .
> 1035884
            Niger |  -.1140107   .0561626    -2.03   0.042    -.2240873   -.
> 0039341
             Togo |  -.2309522    .051943    -4.45   0.000    -.3327587   -.
> 1291457
          Burundi |  -.2696712   .0874591    -3.08   0.002    -.4410878   -.
> 0982545
         Cameroon |  -.2413163   .0501826    -4.81   0.000    -.3396725   -.
> 1429602
                  |  -.3533972   .0520855    -6.78   0.000    -.4554829   -.
> 2513115
           Guinea |  -.1873351   .0493979    -3.79   0.000    -.2841531   -.
> 0905171
                  |
            _cons |    .325142   .0367875     8.84   0.000     .2530397    .
> 3972442
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.1065926	.0073143	.0931791	.121937
sd(Residual)	.632958	.0023318	.6284043	.6375447

LR test vs. linear model: chibar2(01) = **488.57** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,198

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0336412 (mean)
                    2.country       =    .0231557 (mean)
                    3.country       =    .0344526 (mean)
                    5.country       =    .0727125 (mean)
                    6.country       =    .0735239 (mean)
                    7.country       =    .0364499 (mean)
                    8.country       =    .0340157 (mean)
                    9.country       =    .0267757 (mean)
                    10.country      =    .0175384 (mean)
                    11.country      =    .0363251 (mean)
                    12.country      =    .0179129 (mean)
                    13.country      =    .0089252 (mean)
                    14.country      =    .0696542 (mean)
                    15.country      =    .0366371 (mean)
                    16.country      =    .0441892 (mean)
                    17.country      =    .0494944 (mean)
                    18.country      =    .0725253 (mean)
                    19.country      =    .0176632 (mean)
                    20.country      =    .0710273 (mean)
                    22.country      =    .0321433 (mean)
                    23.country      =    .0338285 (mean)
                    24.country      =    .0292723 (mean)
                    25.country      =    .0340157 (mean)
                    26.country      =    .0210336 (mean)
                    27.country      =    .0361378 (mean)
                    28.country      =    .0369492 (mean)
              0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0333936 (mean)
                    2.country       =    .0241106 (mean)
                    3.country       =    .0348888 (mean)
                    5.country       =    .0720204 (mean)
                    6.country       =    .0732665 (mean)
                    7.country       =    .0364463 (mean)
                    8.country       =    .0347642 (mean)
                    9.country       =    .0259174 (mean)
                    10.country      =    .0186904 (mean)
                    11.country      =    .0362594 (mean)
                    12.country      =    .0176313 (mean)
                    13.country      =    .0102174 (mean)
                    14.country      =    .0685939 (mean)
```

```
      15.country      =    .0361971 (mean)
      16.country      =    .0452931 (mean)
      17.country      =     .046913 (mean)
      18.country      =    .0726434 (mean)
      19.country      =    .0190642 (mean)
      20.country      =    .0710236 (mean)
      22.country      =    .0311507 (mean)
      23.country      =    .0337051 (mean)
      24.country      =      .03059 (mean)
      25.country      =    .0328328 (mean)
      26.country      =    .0219301 (mean)
      27.country      =     .035761 (mean)
      28.country      =    .0366955 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035322 (mean)
      10.country      =    .3559655 (mean)
      12.country      =    .3163265 (mean)
      13.country      =    .1236264 (mean)
      17.country      =    .0784929 (mean)
      19.country      =    .0816327 (mean)
      20.country      =    .0125589 (mean)
      22.country      =    .0062794 (mean)
      23.country      =    .0215856 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031044 (mean)
      10.country      =    .3399302 (mean)
      12.country      =    .3220799 (mean)
      13.country      =    .1218471 (mean)
      17.country      =     .088863 (mean)
      19.country      =    .0811021 (mean)
      20.country      =    .0120295 (mean)
      22.country      =    .0085371 (mean)
      23.country      =    .0225068 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1463841   .0094208    15.54   0.000     .1279197    .
> 1648485
 Patrilineal/Mixed #|
            Female  |  -.0949379   .0094023   -10.10   0.000    -.1133661   -.
> 0765097
  Matrilineal#Male  |   .1439171   .0263321     5.47   0.000     .0923071    .
> 1955271
Matrilineal#Female  |  -.0377828   .0260133    -1.45   0.146    -.0887679    .
> 0132024
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,198

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4995479 (mean)
                   1.female        =    .5004521 (mean)
                   matlin          =           0
                   1.country       =    .0335173 (mean)
                   2.country       =    .0236336 (mean)
                   3.country       =    .0346709 (mean)
                   5.country       =    .0723662 (mean)
                   6.country       =    .0733951 (mean)
                   7.country       =    .0364481 (mean)
                   8.country       =    .0343903 (mean)
                   9.country       =    .0263461 (mean)
                   10.country      =    .0181149 (mean)
                   11.country      =    .0362922 (mean)
                   12.country      =     .017772 (mean)
                   13.country      =    .0095719 (mean)
                   14.country      =    .0691236 (mean)
                   15.country      =    .0364169 (mean)
                   16.country      =    .0447417 (mean)
                   17.country      =    .0482025 (mean)
                   18.country      =    .0725844 (mean)
```

```
                    19.country      =    .0183644 (mean)
                    20.country      =    .0710255 (mean)
                    22.country      =    .0316466 (mean)
                    23.country      =    .0337667 (mean)
                    24.country      =    .0299317 (mean)
                    25.country      =    .0334238 (mean)
                    26.country      =    .0214822 (mean)
                    27.country      =    .0359492 (mean)
                    28.country      =    .0368222 (mean)
                1.matlin
                    0.female        =    .4971707 (mean)
                    1.female        =    .5028293 (mean)
                    matlin          =           1
                    3.country       =    .0033171 (mean)
                    10.country      =    .3479024 (mean)
                    12.country      =    .3192195 (mean)
                    13.country      =    .1227317 (mean)
                    17.country      =    .0837073 (mean)
                    19.country      =    .0813659 (mean)
                    20.country      =    .0122927 (mean)
                    22.country      =    .0074146 (mean)
                    23.country      =    .0220488 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2409962   .0070799   -34.04   0.000    -.2548726   -.2
> 271199
      Matrilineal   |  -.1809663   .0177086   -10.22   0.000    -.2156744   -.1
> 462582
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -38426.629
Iteration 1:   log likelihood = -38426.629
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,198
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       97.1
                                                              max =      1,754

                                                Wald chi2(28)     =    2120.93
Log likelihood = -38426.629                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> ------
          civindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> ------
             female |
             Female |  -.2186541   .0075689   -28.89   0.000    -.2334889   -.
> 2038194
                    |
             matlin |
         Matrilineal |  -.1790659   .0327215    -5.47   0.000    -.2431988   -.
> 1149329
                    |
      female#matlin |
Female#Matrilineal |   .1130694   .0203892     5.55   0.000     .0731073    .
> 1530315
                    |
            country |
           Botswana |  -.2977237    .056476    -5.27   0.000    -.4084146   -.
> 1870327
       Burkina Faso |   .1356855   .0567212     2.39   0.017      .024514
> .246857
              Ghana |  -.1973191   .0498934    -3.95   0.000    -.2951082   -.
> 0995299
              Kenya |   .2111351   .0502652     4.20   0.000     .1126171    .
> 3096531
            Lesotho |   .0062642   .0542632     0.12   0.908    -.1000897
> .112618
            Liberia |   .1049737   .0535784     1.96   0.050    -.0000381    .
> 2099854
         Madagascar |  -.3066189   .0595696    -5.15   0.000    -.4233731   -.
> 1898646
             Malawi |   .7995108   .0541587    14.76   0.000     .6933617    .
> 9056598
               Mali |   .1657599   .0533325     3.11   0.002     .0612302    .
```

```
> 2702897
       Mozambique |   .2023057   .0503448     4.02   0.000     .1036317    .
> 3009796
         Namibia |  -.2446332   .0698661    -3.50   0.000    -.3815683   -.
> 1076981
         Nigeria |  -.1894674   .0411081    -4.61   0.000    -.2700377   -.
> 1088971
         Senegal |   .3277841   .0627384     5.22   0.000     .2048191    .
> 4507491
    South Africa |  -.2069209   .0568554    -3.64   0.000    -.3183554   -.
> 0954863
        Tanzania |   .3117827   .0465483     6.70   0.000     .2205496    .
> 4030158
          Uganda |   .1214153   .0485259     2.50   0.012     .0263063    .
> 2165244
          Zambia |   .0002473   .0552472     0.00   0.996    -.1080352    .
> 1085298
        Zimbabwe |  -.0354041   .0514708    -0.69   0.492    -.1362849    .
> 0654768
    Sierra Leone |   .0685517   .0576162     1.19   0.234     -.044374    .
> 1814775
           Niger |  -.1606959   .0590005    -2.72   0.006    -.2763347   -.
> 0450571
            Togo |   .2122858   .0546506     3.88   0.000     .1051725    .
> 3193991
         Burundi |   .2352708   .0902937     2.61   0.009     .0582984    .
> 4122432
        Cameroon |   .1769738    .052809     3.35   0.001       .07347    .
> 2804776
                 |   .2981931   .0547092     5.45   0.000     .1909651    .
> 4054212
          Guinea |   .3311494   .0520463     6.36   0.000     .2291406    .
> 4331582
                 |
           _cons |   .0517624   .0387285     1.34   0.181    -.0241441    .
> 1276688
-----------------+------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1091148**	**.0078676**	**.0947347**	**.1256777**
sd(Residual)	**.6767094**	**.0024934**	**.67184**	**.6816141**

LR test vs. linear model: chibar2(01) = **366.66** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,198

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0336412 (mean)
                    2.country       =    .0231557 (mean)
                    3.country       =    .0344526 (mean)
                    5.country       =    .0727125 (mean)
                    6.country       =    .0735239 (mean)
                    7.country       =    .0364499 (mean)
                    8.country       =    .0340157 (mean)
                    9.country       =    .0267757 (mean)
                    10.country      =    .0175384 (mean)
                    11.country      =    .0363251 (mean)
                    12.country      =    .0179129 (mean)
                    13.country      =    .0089252 (mean)
                    14.country      =    .0696542 (mean)
                    15.country      =    .0366371 (mean)
                    16.country      =    .0441892 (mean)
                    17.country      =    .0494944 (mean)
                    18.country      =    .0725253 (mean)
                    19.country      =    .0176632 (mean)
                    20.country      =    .0710273 (mean)
                    22.country      =    .0321433 (mean)
                    23.country      =    .0338285 (mean)
                    24.country      =    .0292723 (mean)
                    25.country      =    .0340157 (mean)
                    26.country      =    .0210336 (mean)
                    27.country      =    .0361378 (mean)
                    28.country      =    .0369492 (mean)
                  0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0333936 (mean)
                    2.country       =    .0241106 (mean)
                    3.country       =    .0348888 (mean)
                    5.country       =    .0720204 (mean)
                    6.country       =    .0732665 (mean)
                    7.country       =    .0364463 (mean)
                    8.country       =    .0347642 (mean)
                    9.country       =    .0259174 (mean)
                    10.country      =    .0186904 (mean)
                    11.country      =    .0362594 (mean)
                    12.country      =    .0176313 (mean)
                    13.country      =    .0102174 (mean)
                    14.country      =    .0685939 (mean)
```

```
      15.country      =    .0361971 (mean)
      16.country      =    .0452931 (mean)
      17.country      =     .046913 (mean)
      18.country      =    .0726434 (mean)
      19.country      =    .0190642 (mean)
      20.country      =    .0710236 (mean)
      22.country      =    .0311507 (mean)
      23.country      =    .0337051 (mean)
      24.country      =      .03059 (mean)
      25.country      =    .0328328 (mean)
      26.country      =    .0219301 (mean)
      27.country      =     .035761 (mean)
      28.country      =    .0366955 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035322 (mean)
      10.country      =    .3559655 (mean)
      12.country      =    .3163265 (mean)
      13.country      =    .1236264 (mean)
      17.country      =    .0784929 (mean)
      19.country      =    .0816327 (mean)
      20.country      =    .0125589 (mean)
      22.country      =    .0062794 (mean)
      23.country      =    .0215856 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031044 (mean)
      10.country      =    .3399302 (mean)
      12.country      =    .3220799 (mean)
      13.country      =    .1218471 (mean)
      17.country      =     .088863 (mean)
      19.country      =    .0811021 (mean)
      20.country      =    .0120295 (mean)
      22.country      =    .0085371 (mean)
      23.country      =    .0225068 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1169056   .0098196    11.91   0.000     .0976596    .
> 1361516
 Patrilineal/Mixed #|
            Female  |  -.1020589   .0098006   -10.41   0.000    -.1212676   -.
> 0828501
  Matrilineal#Male  |   .2125356   .0273865     7.76   0.000     .1588591    .
> 2662121
Matrilineal#Female  |   .0989302   .0270515     3.66   0.000     .0459101    .
> 1519502
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,198

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4995479 (mean)
                   1.female        =    .5004521 (mean)
                   matlin          =           0
                   1.country       =    .0335173 (mean)
                   2.country       =    .0236336 (mean)
                   3.country       =    .0346709 (mean)
                   5.country       =    .0723662 (mean)
                   6.country       =    .0733951 (mean)
                   7.country       =    .0364481 (mean)
                   8.country       =    .0343903 (mean)
                   9.country       =    .0263461 (mean)
                   10.country      =    .0181149 (mean)
                   11.country      =    .0362922 (mean)
                   12.country      =     .017772 (mean)
                   13.country      =    .0095719 (mean)
                   14.country      =    .0691236 (mean)
                   15.country      =    .0364169 (mean)
                   16.country      =    .0447417 (mean)
                   17.country      =    .0482025 (mean)
                   18.country      =    .0725844 (mean)
```

```
                    19.country      =    .0183644 (mean)
                    20.country      =    .0710255 (mean)
                    22.country      =    .0316466 (mean)
                    23.country      =    .0337667 (mean)
                    24.country      =    .0299317 (mean)
                    25.country      =    .0334238 (mean)
                    26.country      =    .0214822 (mean)
                    27.country      =    .0359492 (mean)
                    28.country      =    .0368222 (mean)
                1.matlin
                    0.female        =    .4971707 (mean)
                    1.female        =    .5028293 (mean)
                    matlin          =           1
                    3.country       =    .0033171 (mean)
                    10.country      =    .3479024 (mean)
                    12.country      =    .3192195 (mean)
                    13.country      =    .1227317 (mean)
                    17.country      =    .0837073 (mean)
                    19.country      =    .0813659 (mean)
                    20.country      =    .0122927 (mean)
                    22.country      =    .0074146 (mean)
                    23.country      =    .0220488 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2186541   .0075689   -28.89   0.000    -.2334889   -.2
> 038194
      Matrilineal   |  -.1055847    .018932    -5.58   0.000    -.1426907   -.0
> 684788
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -50835.162
Iteration 1:   log likelihood = -50835.162
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,782
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.0
                                                              max =      1,747

                                                Wald chi2(28)     =    1564.79
Log likelihood = -50835.162                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
      z_polinterest |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
            female |
            Female  |  -.3160674   .0107824   -29.31   0.000    -.3372006   -.
> 2949342
                   |
             matlin |
        Matrilineal |  -.0073726   .0467853    -0.16   0.875      -.09907    .
> 0843248
                   |
      female#matlin |
Female#Matrilineal  |   .0804382   .0291891     2.76   0.006     .0232287    .
> 1376477
                   |
           country |
          Botswana  |   .3013418   .0803514     3.75   0.000     .1438559    .
> 4588277
      Burkina Faso  |   -.094631   .0807595    -1.17   0.241    -.2529168    .
> 0636548
             Ghana  |   .1425523   .0709969     2.01   0.045     .0034009    .
> 2817036
             Kenya  |   .1066736   .0716088     1.49   0.136    -.0336771    .
> 2470243
           Lesotho  |   .5640556   .0773407     7.29   0.000     .4124706    .
> 7156407
           Liberia  |  -.0299936   .0763798    -0.39   0.695    -.1796952
> .119708
        Madagascar  |  -.2285222    .084922    -2.69   0.007    -.3949662   -.
> 0620782
            Malawi  |   .3669281   .0773637     4.74   0.000      .215298    .
> 5185582
              Mali  |   .2605491   .0759414     3.43   0.001     .1117066    .
```

```
> 4093915
        Mozambique |   .1850347    .072151     2.56   0.010     .0436214
> .326448
          Namibia |   .2403092   .0994951     2.42   0.016     .0453024    .
> 4353159
          Nigeria |   .2998247   .0584493     5.13   0.000     .1852662    .
> 4143832
          Senegal |   .4640567   .0893159     5.20   0.000     .2890008    .
> 6391126
     South Africa |    .222933   .0811441     2.75   0.006     .0638935    .
> 3819726
         Tanzania |   .6090091   .0662438     9.19   0.000     .4791736    .
> 7388445
           Uganda |   .3381799   .0690559     4.90   0.000     .2028328
> .473527
           Zambia |   .2399441   .0787817     3.05   0.002     .0855348    .
> 3943534
         Zimbabwe |   .2329798   .0732808     3.18   0.001     .0893521    .
> 3766075
     Sierra Leone |   .2327531   .0822221     2.83   0.005     .0716008    .
> 3939054
            Niger |   .3341447   .0840867     3.97   0.000     .1693378    .
> 4989517
             Togo |  -.0617453   .0777244    -0.79   0.427    -.2140824    .
> 0905917
          Burundi |   .3713887   .1288415     2.88   0.004      .118864    .
> 6239134
         Cameroon |  -.1324526   .0753506    -1.76   0.079     -.280137    .
> 0152318
                  |  -.5051724   .0778931    -6.49   0.000    -.6578401   -.
> 3525046
           Guinea |   .1749286   .0741703     2.36   0.018     .0295574    .
> 3202998
                  |
            _cons |  -.0709106   .0550754    -1.29   0.198    -.1788564    .
> 0370351
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.155739	.0114253	.1348812	.1798222
sd(Residual)	.9593224	.0035555	.9523791	.9663164

LR test vs. linear model: chibar2(01) = **288.30** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     36,782

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0338525 (mean)
                    2.country       =    .0232383 (mean)
                    3.country       =    .0345434 (mean)
                    5.country       =    .0729808 (mean)
                    6.country       =     .073546 (mean)
                    7.country       =    .0362392 (mean)
                    8.country       =    .0337897 (mean)
                    9.country       =    .0268182 (mean)
                    10.country      =    .0175229 (mean)
                    11.country      =    .0364276 (mean)
                    12.country      =    .0174601 (mean)
                    13.country      =    .0088557 (mean)
                    14.country      =    .0697149 (mean)
                    15.country      =    .0368044 (mean)
                    16.country      =    .0439643 (mean)
                    17.country      =    .0498053 (mean)
                    18.country      =    .0727296 (mean)
                    19.country      =    .0177741 (mean)
                    20.country      =    .0714734 (mean)
                    22.country      =    .0321568 (mean)
                    23.country      =    .0337897 (mean)
                    24.country      =    .0290165 (mean)
                    25.country      =    .0338525 (mean)
                    26.country      =    .0208517 (mean)
                    27.country      =    .0360507 (mean)
                    28.country      =    .0367416 (mean)
                0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =     .033771 (mean)
                    2.country       =    .0243656 (mean)
                    3.country       =     .034781 (mean)
                    5.country       =     .072655 (mean)
                    6.country       =    .0732862 (mean)
                    7.country       =    .0364853 (mean)
                    8.country       =    .0338972 (mean)
                    9.country       =    .0256281 (mean)
                    10.country      =    .0186214 (mean)
                    11.country      =    .0364222 (mean)
                    12.country      =    .0160333 (mean)
                    13.country      =    .0103522 (mean)
                    14.country      =    .0688676 (mean)
```

```
    15.country      =    .0364222 (mean)
    16.country      =    .0453226 (mean)
    17.country      =    .0472163 (mean)
    18.country      =    .0729706 (mean)
    19.country      =    .0193157 (mean)
    20.country      =    .0718975 (mean)
    22.country      =    .0311829 (mean)
    23.country      =    .0337079 (mean)
    24.country      =    .0302992 (mean)
    25.country      =    .0328873 (mean)
    26.country      =    .0217776 (mean)
    27.country      =    .0357909 (mean)
    28.country      =    .0360434 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0035971 (mean)
    10.country      =     .361311 (mean)
    12.country      =    .3061551 (mean)
    13.country      =    .1258993 (mean)
    17.country      =    .0791367 (mean)
    19.country      =    .0827338 (mean)
    20.country      =    .0127898 (mean)
    22.country      =    .0063949 (mean)
    23.country      =    .0219824 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0031797 (mean)
    10.country      =    .3465819 (mean)
    12.country      =    .3100159 (mean)
    13.country      =    .1248013 (mean)
    17.country      =    .0894277 (mean)
    19.country      =    .0826709 (mean)
    20.country      =    .0119237 (mean)
    22.country      =     .008744 (mean)
    23.country      =     .022655 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1242871    .014004     8.88   0.000     .0968398    .
> 1517343
 Patrilineal/Mixed #|
            Female  |  -.1925928   .0140038   -13.75   0.000    -.2200398   -.
> 1651459
  Matrilineal#Male  |   .2207155   .0392001     5.63   0.000     .1438848    .
> 2975463
Matrilineal#Female  |  -.0130062    .038747    -0.34   0.737     -.088949    .
> 0629365
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     36,782

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .5012593 (mean)
                   1.female        =    .4987407 (mean)
                   matlin          =           0
                   1.country       =    .0338119 (mean)
                   2.country       =    .0238005 (mean)
                   3.country       =    .0346619 (mean)
                   5.country       =    .0728183 (mean)
                   6.country       =    .0734164 (mean)
                   7.country       =    .0363619 (mean)
                   8.country       =    .0338433 (mean)
                   9.country       =    .0262247 (mean)
                   10.country      =    .0180708 (mean)
                   11.country      =    .0364249 (mean)
                   12.country      =    .0167485 (mean)
                   13.country      =    .0096021 (mean)
                   14.country      =    .0692923 (mean)
                   15.country      =    .0366138 (mean)
                   16.country      =    .0446417 (mean)
                   17.country      =     .048514 (mean)
                   18.country      =    .0728498 (mean)
```

```
                    19.country      =     .018543 (mean)
                    20.country      =    .0716849 (mean)
                    22.country      =    .0316711 (mean)
                    23.country      =    .0337489 (mean)
                    24.country      =    .0296562 (mean)
                    25.country      =    .0333711 (mean)
                    26.country      =    .0213134 (mean)
                    27.country      =    .0359212 (mean)
                    28.country      =    .0363934 (mean)
                1.matlin
                    0.female        =     .498605 (mean)
                    1.female        =     .501395 (mean)
                    matlin          =           1
                    3.country       =    .0033878 (mean)
                    10.country      =    .3539259 (mean)
                    12.country      =    .3080909 (mean)
                    13.country      =    .1253487 (mean)
                    17.country      =    .0842965 (mean)
                    19.country      =    .0827023 (mean)
                    20.country      =    .0123555 (mean)
                    22.country      =    .0075727 (mean)
                    23.country      =    .0223196 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.3160674   .0107824   -29.31   0.000    -.3372006   -.2
> 949342
      Matrilineal   |  -.2356292   .0271238    -8.69   0.000     -.288791   -.1
> 824675
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -50840.987
Iteration 1:   log likelihood = -50840.985
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,898
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.3
                                                              max =      1,748

                                                Wald chi2(28)     =    1876.16
Log likelihood = -50840.985                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
       z_poldiscuss |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
            female |
            Female |  -.3824609   .0107293   -35.65   0.000    -.4034898   -.
> 3614319
                   |
            matlin |
       Matrilineal |   .0285813   .0422213     0.68   0.498    -.0541709    .
> 1113334
                   |
      female#matlin |
Female#Matrilineal |   .0631362   .0290178     2.18   0.030     .0062623
>  .12001
                   |
           country |
          Botswana |   -.132209   .0735689    -1.80   0.072    -.2764014    .
> 0119834
      Burkina Faso |  -.1460597   .0740641    -1.97   0.049    -.2912228   -.
> 0008967
             Ghana |  -.1993495    .065587    -3.04   0.002    -.3278977   -.
> 0708014
             Kenya |  -.0129697   .0652209    -0.20   0.842    -.1408003    .
> 1148608
           Lesotho |   .1480027   .0704681     2.10   0.036     .0098877    .
> 2861177
           Liberia |  -.3882984   .0698731    -5.56   0.000    -.5252473   -.
> 2513496
        Madagascar |  -.5779806   .0772372    -7.48   0.000    -.7293628   -.
> 4265984
            Malawi |   .0913478   .0711871     1.28   0.199    -.0481764
> .230872
              Mali |  -.1830947   .0699595    -2.62   0.009    -.3202128   -.
```

```
> 0459765
       Mozambique |    .008239   .0665562     0.12   0.901    -.1222088    .
> 1386868
         Namibia |   -.1441191   .0893511    -1.61   0.107    -.3192439    .
> 0310058
         Nigeria |    .1147667   .0555278     2.07   0.039     .0059342    .
> 2235991
         Senegal |    .3590938   .0802576     4.47   0.000     .2017918    .
> 5163957
    South Africa |    .026291   .0732505     0.36   0.720    -.1172772    .
> 1698593
        Tanzania |    .275458   .0611276     4.51   0.000     .1556501    .
> 3952659
          Uganda |    .0275334   .0632032     0.44   0.663    -.0963426    .
> 1514094
          Zambia |   -.1641972   .0726404    -2.26   0.024    -.3065698   -.
> 0218246
        Zimbabwe |    .0293273   .0671984     0.44   0.663    -.1023792    .
> 1610338
    Sierra Leone |   -.0063439   .0751928    -0.08   0.933    -.1537192    .
> 1410313
           Niger |    .202391   .0775378     2.61   0.009     .0504196    .
> 3543624
            Togo |   -.2529721   .0722496    -3.50   0.000    -.3945787   -.
> 1113656
         Burundi |   -.3646743   .1109407    -3.29   0.001     -.582114   -.
> 1472346
        Cameroon |   -.1386984   .0703271    -1.97   0.049     -.276537   -.
> 0008597
                 |   -.362319   .0719234    -5.04   0.000    -.5032862   -.
> 2213518
          Guinea |   -.1433114   .0693595    -2.07   0.039    -.2792534   -.
> 0073693
                 |
           _cons |    .2211763   .0513563     4.31   0.000     .1205197    .
> 3218328
-----------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1287438**	**.0103663**	**.1099482**	**.1507523**
sd(Residual)	**.9561721**	**.0035364**	**.9492659**	**.9631285**

LR test vs. linear model: chibar2(01) = **220.50** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     36,898

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0337995 (mean)
                    2.country       =    .0232019 (mean)
                    3.country       =     .034552 (mean)
                    5.country       =    .0728037 (mean)
                    6.country       =    .0734934 (mean)
                    7.country       =    .0363705 (mean)
                    8.country       =    .0338622 (mean)
                    9.country       =    .0268389 (mean)
                    10.country      =    .0176209 (mean)
                    11.country      =    .0363705 (mean)
                    12.country      =    .0173073 (mean)
                    13.country      =    .0089672 (mean)
                    14.country      =    .0698564 (mean)
                    15.country      =     .036684 (mean)
                    16.country      =    .0440208 (mean)
                    17.country      =    .0497272 (mean)
                    18.country      =    .0723647 (mean)
                    19.country      =    .0177463 (mean)
                    20.country      =    .0712987 (mean)
                    22.country      =    .0319182 (mean)
                    23.country      =    .0339249 (mean)
                    24.country      =    .0291591 (mean)
                    25.country      =    .0341757 (mean)
                    26.country      =    .0209444 (mean)
                    27.country      =    .0363078 (mean)
                    28.country      =     .036684 (mean)
                0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =     .033633 (mean)
                    2.country       =    .0243289 (mean)
                    3.country       =    .0350789 (mean)
                    5.country       =    .0724209 (mean)
                    6.country       =    .0732382 (mean)
                    7.country       =    .0365877 (mean)
                    8.country       =    .0337587 (mean)
                    9.country       =    .0258377 (mean)
                    10.country      =    .0188596 (mean)
                    11.country      =    .0365248 (mean)
                    12.country      =    .0162821 (mean)
                    13.country      =    .0102471 (mean)
                    14.country      =    .0690891 (mean)
```

```
    15.country      =    .0365248 (mean)
    16.country      =    .0453888 (mean)
    17.country      =    .0470862 (mean)
    18.country      =    .0726724 (mean)
    19.country      =    .0192368 (mean)
    20.country      =    .0715408 (mean)
    22.country      =    .0308669 (mean)
    23.country      =    .0336959 (mean)
    24.country      =    .0307412 (mean)
    25.country      =    .0328786 (mean)
    26.country      =    .0215628 (mean)
    27.country      =    .0358333 (mean)
    28.country      =    .0360847 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0035842 (mean)
    10.country      =    .3592194 (mean)
    12.country      =     .308642 (mean)
    13.country      =    .1250498 (mean)
    17.country      =    .0796495 (mean)
    19.country      =    .0828355 (mean)
    20.country      =    .0127439 (mean)
    22.country      =     .006372 (mean)
    23.country      =    .0219036 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0031583 (mean)
    10.country      =     .343861 (mean)
    12.country      =    .3142519 (mean)
    13.country      =    .1235689 (mean)
    17.country      =    .0892223 (mean)
    19.country      =    .0821161 (mean)
    20.country      =    .0122385 (mean)
    22.country      =    .0086854 (mean)
    23.country      =    .0228977 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |     .17084   .0125925    13.57   0.000     .1461591    .
> 1955208
 Patrilineal/Mixed #|
            Female  |  -.2120851   .0125857   -16.85   0.000    -.2367527   -.
> 1874175
  Matrilineal#Male  |   .2796739   .0348029     8.04   0.000     .2114614    .
> 3478864
Matrilineal#Female  |  -.0378052   .0343804    -1.10   0.271    -.1051894    .
> 0295791
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     36,898

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .5006279 (mean)
                   1.female        =    .4993721 (mean)
                   matlin          =           0
                   1.country       =    .0337163 (mean)
                   2.country       =    .0237647 (mean)
                   3.country       =    .0348151 (mean)
                   5.country       =    .0726125 (mean)
                   6.country       =     .073366 (mean)
                   7.country       =    .0364789 (mean)
                   8.country       =    .0338105 (mean)
                   9.country       =    .0263389 (mean)
                   10.country      =    .0182395 (mean)
                   11.country      =    .0364475 (mean)
                   12.country      =    .0167954 (mean)
                   13.country      =    .0096063 (mean)
                   14.country      =    .0694732 (mean)
                   15.country      =    .0366045 (mean)
                   16.country      =     .044704 (mean)
                   17.country      =    .0484084 (mean)
                   18.country      =    .0725184 (mean)
```

```
                    19.country      =    .0184906 (mean)
                    20.country      =    .0714196 (mean)
                    22.country      =    .0313932 (mean)
                    23.country      =    .0338105 (mean)
                    24.country      =    .0299491 (mean)
                    25.country      =     .033528 (mean)
                    26.country      =    .0212532 (mean)
                    27.country      =    .0360708 (mean)
                    28.country      =    .0363848 (mean)
                1.matlin
                    0.female        =    .4978192 (mean)
                    1.female        =    .5021808 (mean)
                    matlin          =           1
                    3.country       =    .0033703 (mean)
                    10.country      =    .3515067 (mean)
                    12.country      =    .3114592 (mean)
                    13.country      =    .1243061 (mean)
                    17.country      =    .0844568 (mean)
                    19.country      =    .0824742 (mean)
                    20.country      =    .0124901 (mean)
                    22.country      =    .0075337 (mean)
                    23.country      =    .0224029 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.3824609   .0107293   -35.65   0.000    -.4034898   -.3
> 614319
      Matrilineal   |  -.3193247   .0269607   -11.84   0.000    -.3721667   -.2
> 664827
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -49693.542
Iteration 1:   log likelihood = -49693.542
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     35,351
Group variable: egroup                          Number of groups  =        382

                                                Obs per group:
                                                              min =          1
                                                              avg =       92.5
                                                              max =      1,690

                                                Wald chi2(28)     =     338.80
Log likelihood = -49693.542                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
    z_polunderstand |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
            female |
            Female |  -.1362064   .0112509   -12.11   0.000    -.1582578    -
> .114155
                   |
            matlin |
       Matrilineal |  -.1025416   .0468768    -2.19   0.029    -.1944185   -.
> 0106647
                   |
      female#matlin |
Female#Matrilineal |   .0968884   .0307203     3.15   0.002     .0366777    .
> 1570991
                   |
           country |
          Botswana |    .205702   .0810007     2.54   0.011     .0469436    .
> 3644603
      Burkina Faso |   .0830134   .0815871     1.02   0.309    -.0768944    .
> 2429211
             Ghana |   .1451886   .0717711     2.02   0.043     .0045198    .
> 2858575
             Kenya |   .0825413   .0723311     1.14   0.254    -.0592251    .
> 2243077
           Lesotho |   .4147944   .0780948     5.31   0.000     .2617313    .
> 5678575
           Liberia |   .2607399   .0775257     3.36   0.001     .1087923    .
> 4126875
        Madagascar |  -.2064739   .0863242    -2.39   0.017    -.3756661   -.
> 0372816
            Malawi |   .1920072   .0784132     2.45   0.014     .0383202    .
> 3456943
              Mali |   .1504984   .0767354     1.96   0.050     .0000998
```

```
> .300897
       Mozambique |   .1808152   .0736071     2.46   0.014      .036548    .
> 3250825
          Namibia |   .2323901   .0992873     2.34   0.019     .0377906    .
> 4269896
          Nigeria |    .30862   .0596522     5.17   0.000     .1917038    .
> 4255362
          Senegal |   .2608754   .0894948     2.91   0.004     .0854689
> .436282
     South Africa |   .2273487   .0811638     2.80   0.005     .0682707    .
> 3864268
         Tanzania |   .0465378   .0669915     0.69   0.487     -.084763    .
> 1778387
           Uganda |   .0176763    .069628     0.25   0.800    -.1187922    .
> 1541447
           Zambia |   .2815591   .0796582     3.53   0.000      .125432    .
> 4376863
         Zimbabwe |   .3889635    .073925     5.26   0.000     .2440732    .
> 5338539
     Sierra Leone |   .2001249   .0830979     2.41   0.016      .037256    .
> 3629938
            Niger |   .2676333   .0853251     3.14   0.002     .1003992    .
> 4348673
             Togo |   .0889147   .0792498     1.12   0.262     -.066412    .
> 2442415
          Burundi |   -.068602   .1267122    -0.54   0.588    -.3169534    .
> 1797494
         Cameroon |   .5001737   .0769455     6.50   0.000     .3493632    .
> 6509841
                  |   .1803268   .0789075     2.29   0.022     .0256709    .
> 3349828
           Guinea |    .191498   .0757762     2.53   0.011     .0429793    .
> 3400166
                  |
            _cons |  -.1317339   .0560072    -2.35   0.019     -.241506   -.
> 0219618
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	.1509122	.0112527	.1303933	.1746601
sd(Residual)	.9824895	.0037135	.9752381	.9897948

LR test vs. linear model: chibar2(01) = **316.22** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     35,351

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =   .0343317  (mean)
                    2.country       =   .0230596  (mean)
                    3.country       =   .0345894  (mean)
                    5.country       =   .0734944  (mean)
                    6.country       =   .0731723  (mean)
                    7.country       =     .03562  (mean)
                    8.country       =    .032657  (mean)
                    9.country       =   .0261514  (mean)
                    10.country      =   .0177134  (mean)
                    11.country      =   .0372303  (mean)
                    12.country      =   .0160386  (mean)
                    13.country      =   .0090177  (mean)
                    14.country      =   .0706602  (mean)
                    15.country      =   .0361353  (mean)
                    16.country      =   .0447665  (mean)
                    17.country      =   .0501771  (mean)
                    18.country      =   .0727858  (mean)
                    19.country      =    .017971  (mean)
                    20.country      =   .0724638  (mean)
                    22.country      =   .0313688  (mean)
                    23.country      =    .033752  (mean)
                    24.country      =   .0287923  (mean)
                    25.country      =   .0343317  (mean)
                    26.country      =   .0206763  (mean)
                    27.country      =    .035942  (mean)
                    28.country      =   .0371014  (mean)
                0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =   .0349354  (mean)
                    2.country       =   .0247928  (mean)
                    3.country       =   .0348691  (mean)
                    5.country       =   .0737819  (mean)
                    6.country       =   .0718595  (mean)
                    7.country       =   .0361949  (mean)
                    8.country       =   .0304939  (mean)
                    9.country       =   .0238648  (mean)
                    10.country      =   .0194896  (mean)
                    11.country      =   .0369904  (mean)
                    12.country      =   .0139211  (mean)
                    13.country      =   .0106066  (mean)
                    14.country      =   .0705336  (mean)
```

```
    15.country      =    .0367252 (mean)
    16.country      =    .0473318 (mean)
    17.country      =    .0481936 (mean)
    18.country      =    .0734504 (mean)
    19.country      =     .019821 (mean)
    20.country      =    .0739808 (mean)
    22.country      =    .0299635 (mean)
    23.country      =    .0337421 (mean)
    24.country      =    .0294995 (mean)
    25.country      =    .0337421 (mean)
    26.country      =    .0203513 (mean)
    27.country      =    .0353331 (mean)
    28.country      =     .035532 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0037391 (mean)
    10.country      =    .3710012 (mean)
    12.country      =    .2841712 (mean)
    13.country      =    .1300374 (mean)
    17.country      =    .0826755 (mean)
    19.country      =    .0859992 (mean)
    20.country      =    .0132946 (mean)
    22.country      =    .0066473 (mean)
    23.country      =    .0224346 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0034276 (mean)
    10.country      =    .3650386 (mean)
    12.country      =    .2720651 (mean)
    13.country      =    .1341045 (mean)
    17.country      =    .0946872 (mean)
    19.country      =    .0865467 (mean)
    20.country      =    .0132819 (mean)
    22.country      =     .008569 (mean)
    23.country      =    .0222793 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed # |
              Male  |   .0422039   .0140089     3.01   0.003      .014747    .
> 0696608
 Patrilineal/Mixed # |
            Female  |  -.0922765   .0141055    -6.54   0.000    -.1199228   -.
> 0646301
  Matrilineal#Male  |  -.0405613   .0390883    -1.04   0.299    -.1171729    .
> 0360503
Matrilineal#Female  |  -.0812426   .0389199    -2.09   0.037    -.1575242   -.
> 0049611
--------------------+---------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     35,351

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .5071872 (mean)
                    1.female        =    .4928128 (mean)
                    matlin          =           0
                    1.country       =    .0346292 (mean)
                    2.country       =    .0239138 (mean)
                    3.country       =    .0347272 (mean)
                    5.country       =    .0736361 (mean)
                    6.country       =    .0725253 (mean)
                    7.country       =    .0359033 (mean)
                    8.country       =     .031591 (mean)
                    9.country       =    .0250245 (mean)
                    10.country      =    .0185887 (mean)
                    11.country      =    .0371121 (mean)
                    12.country      =    .0149951 (mean)
                    13.country      =    .0098007 (mean)
                    14.country      =    .0705978 (mean)
                    15.country      =     .036426 (mean)
                    16.country      =    .0460307 (mean)
                    17.country      =    .0491996 (mean)
                    18.country      =    .0731134 (mean)
```

```
                    19.country      =    .0188827 (mean)
                    20.country      =    .0732114 (mean)
                    22.country      =    .0306762 (mean)
                    23.country      =    .0337471 (mean)
                    24.country      =    .0291408 (mean)
                    25.country      =    .0340412 (mean)
                    26.country      =    .0205162 (mean)
                    27.country      =    .0356419 (mean)
                    28.country      =     .036328 (mean)
                1.matlin
                    0.female        =    .5076988 (mean)
                    1.female        =    .4923012 (mean)
                    matlin          =           1
                    3.country       =    .0035857 (mean)
                    10.country      =    .3680658 (mean)
                    12.country      =    .2782113 (mean)
                    13.country      =    .1320397 (mean)
                    17.country      =    .0885889 (mean)
                    19.country      =    .0862687 (mean)
                    20.country      =    .0132883 (mean)
                    22.country      =    .0075933 (mean)
                    23.country      =    .0223582 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.1362064   .0112509   -12.11   0.000    -.1582578    -.
> 114155
      Matrilineal   |   -.039318   .0285854    -1.38   0.169    -.0953443    .0
> 167083
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:
```

```
Iteration 0:   log likelihood = -51585.338
Iteration 1:   log likelihood = -51585.293
Iteration 2:   log likelihood = -51585.293

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,077
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.8
                                                              max =      1,752

                                                Wald chi2(28)     =     594.29
Log likelihood = -51585.293                     Prob > chi2       =     0.0000
```

z_voted	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
female						
Female	-.1054068	.0108613	-9.70	0.000	-.1266945	-.084119
matlin						
Matrilineal	-.0762276	.0381763	-2.00	0.046	-.1510518	-.0014034
female#matlin						
Female#Matrilineal	.0825463	.0292801	2.82	0.005	.0251584	.1399343
country						
Botswana	-.6215973	.0673902	-9.22	0.000	-.7536796	-.4895149
Burkina Faso	-.4704989	.0679104	-6.93	0.000	-.6036008	-.337397
Ghana	-.2980265	.0602944	-4.94	0.000	-.4162013	-.1798518
Kenya	-.368967	.0591076	-6.24	0.000	-.4848158	-.2531182
Lesotho	-.326786	.0641072	-5.10	0.000	-.4524337	-.2011383
Liberia	.0210811	.0636374	0.33	0.740	-.103646	.1458082
Madagascar	-.4903513	.0703215	-6.97	0.000	-.628179	-.

```
> 3525236
            Malawi |   -.175748    .065102    -2.70   0.007    -.3033456   -.
> 0481504
              Mali |  -.5616648   .0642813    -8.74   0.000     -.687654   -.
> 4356757
        Mozambique |  -.3729961   .0610921    -6.11   0.000    -.4927345   -.
> 2532577
           Namibia |  -.4094546   .0797045    -5.14   0.000    -.5656726   -.
> 2532367
           Nigeria |   -.245819   .0527195    -4.66   0.000    -.3491474   -.
> 1424906
           Senegal |  -.3168798   .0716074    -4.43   0.000    -.4572278   -.
> 1765318
      South Africa |  -.3096073    .065769    -4.71   0.000    -.4385121   -.
> 1807025
          Tanzania |  -.1639337    .056335    -2.91   0.004    -.2743483    -
> .053519
            Uganda |  -.1299861   .0576322    -2.26   0.024     -.242943   -.
> 0170291
            Zambia |  -.5223265   .0668749    -7.81   0.000     -.653399    -
> .391254
          Zimbabwe |  -.4897222   .0611289    -8.01   0.000    -.6095327   -.
> 3699117
      Sierra Leone |  -.3693805   .0683727    -5.40   0.000    -.5033884   -.
> 2353725
             Niger |  -.0880031   .0707517    -1.24   0.214    -.2266739    .
> 0506677
              Togo |  -.2002612   .0669293    -2.99   0.003    -.3314402   -.
> 0690822
           Burundi |  -.0858944    .094029    -0.91   0.361    -.2701878    .
> 0983991
          Cameroon |  -.7550116   .0657215   -11.49   0.000    -.8838234   -.
> 6261998
                   |  -.5269152   .0660884    -7.97   0.000    -.6564461   -.
> 3973842
            Guinea |  -.1363918   .0644297    -2.12   0.034    -.2626717   -.
> 0101118
                   |
             _cons |   .3730468   .0476825     7.82   0.000     .2795908    .
> 4665028
-------------------+------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.1020394**	**.010224**	**.0838457**	**.1241811**
sd(Residual)	**.9700519**	**.0035792**	**.9630622**	**.9770924**

LR test vs. linear model: chibar2(01) = **106.17** Prob >= chibar2 = **0.0000**

Adjusted predictions Number of obs = **37,077**

Expression : **Linear prediction, fixed portion, predict()**
over : **matlin female**
at : 0.matlin#0.female

female	=	**0**	
matlin	=	**0**	
1.country	=	**.0337191**	(mean)
2.country	=	**.0232093**	(mean)
3.country	=	**.0342821**	(mean)
5.country	=	**.0728808**	(mean)
6.country	=	**.073569**	(mean)
7.country	=	**.0365343**	(mean)
8.country	=	**.0339693**	(mean)
9.country	=	**.0263372**	(mean)
10.country	=	**.017579**	(mean)
11.country	=	**.036284**	(mean)
12.country	=	**.0179543**	(mean)
13.country	=	**.0089459**	(mean)
14.country	=	**.0695652**	(mean)
15.country	=	**.0366594**	(mean)
16.country	=	**.044229**	(mean)
17.country	=	**.0494839**	(mean)
18.country	=	**.0726931**	(mean)
19.country	=	**.017579**	(mean)
20.country	=	**.0711917**	(mean)
22.country	=	**.0320926**	(mean)
23.country	=	**.0337817**	(mean)
24.country	=	**.02934**	(mean)
25.country	=	**.0340319**	(mean)
26.country	=	**.020832**	(mean)
27.country	=	**.0362215**	(mean)
28.country	=	**.0370347**	(mean)
0.matlin#1.female			
female	=	**1**	
matlin	=	**0**	
1.country	=	**.033521**	(mean)
2.country	=	**.0242026**	(mean)
3.country	=	**.0345841**	(mean)

```
      5.country        =     .072045 (mean)
      6.country        =    .0733583 (mean)
      7.country        =    .0364603 (mean)
      8.country        =    .0348343 (mean)
      9.country        =    .0252033 (mean)
      10.country       =    .0187617 (mean)
      11.country       =    .0362727 (mean)
      12.country       =    .0175735 (mean)
      13.country       =    .0102564 (mean)
      14.country       =    .0684178 (mean)
      15.country       =    .0363352 (mean)
      16.country       =    .0452158 (mean)
      17.country       =    .0469669 (mean)
      18.country       =    .0727955 (mean)
      19.country       =     .019137 (mean)
      20.country       =     .071232 (mean)
      22.country       =    .0310194 (mean)
      23.country       =    .0337086 (mean)
      24.country       =    .0305816 (mean)
      25.country       =    .0329581 (mean)
      26.country       =    .0218261 (mean)
      27.country       =    .0358974 (mean)
      28.country       =    .0368355 (mean)
1.matlin#0.female
      female           =            0
      matlin           =            1
      3.country        =    .0035461 (mean)
      10.country       =     .356186 (mean)
      12.country       =    .3148148 (mean)
      13.country       =    .1241135 (mean)
      17.country       =    .0788022 (mean)
      19.country       =    .0819543 (mean)
      20.country       =    .0126084 (mean)
      22.country       =    .0063042 (mean)
      23.country       =    .0216706 (mean)
1.matlin#1.female
      female           =            1
      matlin           =            1
      3.country        =    .0031201 (mean)
      10.country       =    .3412637 (mean)
      12.country       =    .3194228 (mean)
      13.country       =    .1224649 (mean)
      17.country       =    .0889236 (mean)
      19.country       =    .0815133 (mean)
      20.country       =    .0120905 (mean)
      22.country       =    .0085803 (mean)
      23.country       =    .0226209 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed # |
              Male  |   .0681499   .0113342     6.01   0.000     .0459353    .
> 0903646
 Patrilineal/Mixed # |
            Female  |  -.0383483   .0113202    -3.39   0.001    -.0605356    -
> .016161
  Matrilineal#Male  |  -.0018273   .0307945    -0.06   0.953    -.0621835    .
> 0585289
Matrilineal#Female  |  -.0250082   .0304298    -0.82   0.411    -.0846494    .
> 0346331
--------------------+---------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,077

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4999218 (mean)
                    1.female        =    .5000782 (mean)
                    matlin          =           0
                    1.country       =     .03362 (mean)
                    2.country       =    .023706 (mean)
                    3.country       =    .0344332 (mean)
                    5.country       =    .0724629 (mean)
                    6.country       =    .0734636 (mean)
                    7.country       =    .0364973 (mean)
                    8.country       =    .0344019 (mean)
                    9.country       =    .0257701 (mean)
                    10.country      =    .0181704 (mean)
                    11.country      =    .0362783 (mean)
                    12.country      =    .0177639 (mean)
                    13.country      =    .0096013 (mean)
                    14.country      =    .0689914 (mean)
                    15.country      =    .0364973 (mean)
                    16.country      =    .0447224 (mean)
                    17.country      =    .0482252 (mean)
                    18.country      =    .0727443 (mean)
```

```
                    19.country      =    .0183581 (mean)
                    20.country      =    .0712119 (mean)
                    22.country      =    .0315559 (mean)
                    23.country      =    .0337451 (mean)
                    24.country      =    .0299609 (mean)
                    25.country      =    .0334949 (mean)
                    26.country      =    .0213292 (mean)
                    27.country      =    .0360594 (mean)
                    28.country      =    .0369351 (mean)
                1.matlin
                    0.female        =     .497452 (mean)
                    1.female        =     .502548 (mean)
                    matlin          =           1
                    3.country       =     .003332 (mean)
                    10.country      =    .3486868 (mean)
                    12.country      =    .3171305 (mean)
                    13.country      =     .123285 (mean)
                    17.country      =    .0838887 (mean)
                    19.country      =    .0817327 (mean)
                    20.country      =    .0123481 (mean)
                    22.country      =    .0074481 (mean)
                    23.country      =    .0221482 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.1054068   .0108613    -9.70   0.000    -.1266945    -.
> 084119
      Matrilineal   |  -.0228604   .0271905    -0.84   0.400    -.0761527    .0
> 304319
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -46567.538
Iteration 1:   log likelihood = -46567.537
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     34,542
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       90.2
                                                              max =      1,738

                                                Wald chi2(28)     =    2571.18
Log likelihood = -46567.537                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
       z_contactpol |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
            female |
            Female |  -.2870713   .0105787   -27.14   0.000    -.3078051   -.
> 2663375
                   |
            matlin |
       Matrilineal |  -.0647131    .043281    -1.50   0.135    -.1495422
> .020116
                   |
      female#matlin |
Female#Matrilineal |   .0926921   .0325271     2.85   0.004     .0289401    .
> 1564441
                   |
           country |
          Botswana |   .3549385   .0723309     4.91   0.000     .2131725    .
> 4967044
      Burkina Faso |   .3098499   .0728578     4.25   0.000     .1670513    .
> 4526485
             Ghana |   .2920752   .0643896     4.54   0.000      .165874    .
> 4182765
             Kenya |   .5444244   .0641363     8.49   0.000     .4187196    .
> 6701292
           Lesotho |   .2733886   .0693736     3.94   0.000     .1374188    .
> 4093584
           Liberia |   .5266474   .0686153     7.68   0.000     .3921638
> .661131
        Madagascar |   1.609787   .0892642    18.03   0.000     1.434832    1
> .784741
            Malawi |   1.616042   .0825482    19.58   0.000      1.45425    1
> .777833
              Mali |    .036411    .068715     0.53   0.596    -.0982679    .
```

```
> 1710899
       Mozambique |  -.0446672   .0660104    -0.68   0.499    -.1740453    .
> 0847109
          Namibia |   .0189185   .0882562     0.21   0.830    -.1540604    .
> 1918974
          Nigeria |  -.1129871   .0542632    -2.08   0.037    -.2193411   -.
> 0066332
          Senegal |   .1178616   .0791932     1.49   0.137    -.0373541    .
> 2730774
     South Africa |   .1497084   .0722605     2.07   0.038     .0080803    .
> 2913364
         Tanzania |   .6933521   .0600537    11.55   0.000      .575649    .
> 8110553
           Uganda |   .5220199   .0621256     8.40   0.000     .4002559    .
> 6437839
           Zambia |    .082929    .071591     1.16   0.247    -.0573868    .
> 2232448
         Zimbabwe |    .564949   .0662243     8.53   0.000     .4351518    .
> 6947463
     Sierra Leone |   .6559669   .0737825     8.89   0.000      .511356    .
> 8005779
            Niger |  -.0115054   .0762334    -0.15   0.880    -.1609201    .
> 1379094
             Togo |  -.2323366    .070906    -3.28   0.001    -.3713098   -.
> 0933633
          Burundi |   .1079239   .1101344     0.98   0.327    -.1079355    .
> 3237834
         Cameroon |   .0692981   .0687663     1.01   0.314    -.0654815    .
> 2040776
                  |  -.1647741   .0706785    -2.33   0.020    -.3033014   -.
> 0262468
           Guinea |  -.0152337   .0679818    -0.22   0.823    -.1484756    .
> 1180081
                  |
            _cons |  -.0910384   .0503609    -1.81   0.071     -.189744    .
> 0076671
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1287846**	**.0093551**	**.1116944**	**.1484899**
sd(Residual)	**.9279306**	**.0035449**	**.9210085**	**.9349046**

LR test vs. linear model: chibar2(01) = **314.46** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     34,542

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0348349 (mean)
                    2.country       =    .0239773 (mean)
                    3.country       =    .0356104 (mean)
                    5.country       =    .0746462 (mean)
                    6.country       =    .0758741 (mean)
                    7.country       =    .0374847 (mean)
                    8.country       =    .0347702 (mean)
                    9.country       =    .0112454 (mean)
                    10.country      =    .0038131 (mean)
                    11.country      =    .0376139 (mean)
                    12.country      =    .0180314 (mean)
                    13.country      =    .0091773 (mean)
                    14.country      =    .0719964 (mean)
                    15.country      =    .0376785 (mean)
                    16.country      =    .0451108 (mean)
                    17.country      =    .0511859 (mean)
                    18.country      =    .0749693 (mean)
                    19.country      =    .0182899 (mean)
                    20.country      =    .0735475 (mean)
                    22.country      =    .0330899 (mean)
                    23.country      =    .0349641 (mean)
                    24.country      =     .030117 (mean)
                    25.country      =    .0352226 (mean)
                    26.country      =    .0216506 (mean)
                    27.country      =    .0371615 (mean)
                    28.country      =    .0379371 (mean)
                0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0348007 (mean)
                    2.country       =    .0250617 (mean)
                    3.country       =     .036294 (mean)
                    5.country       =    .0742761 (mean)
                    6.country       =    .0762888 (mean)
                    7.country       =    .0376574 (mean)
                    8.country       =    .0357096 (mean)
                    9.country       =    .0074666 (mean)
                    10.country      =    .0033113 (mean)
                    11.country      =    .0377873 (mean)
                    12.country      =    .0175951 (mean)
                    13.country      =    .0103883 (mean)
                    14.country      =    .0714193 (mean)
```

```
    15.country      =    .0376574 (mean)
    16.country      =    .0466822 (mean)
    17.country      =    .0488898 (mean)
    18.country      =    .0755746 (mean)
    19.country      =    .0198675 (mean)
    20.country      =    .0739514 (mean)
    22.country      =    .0322036 (mean)
    23.country      =    .0347357 (mean)
    24.country      =    .0314245 (mean)
    25.country      =    .0340865 (mean)
    26.country      =    .0227243 (mean)
    27.country      =    .0369433 (mean)
    28.country      =     .037203 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0048754 (mean)
    10.country      =    .1224269 (mean)
    12.country      =    .4263272 (mean)
    13.country      =    .1706392 (mean)
    17.country      =    .1078007 (mean)
    19.country      =    .1121343 (mean)
    20.country      =    .0173348 (mean)
    22.country      =    .0086674 (mean)
    23.country      =    .0297941 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =     .003844 (mean)
    10.country      =    .0834706 (mean)
    12.country      =    .4415157 (mean)
    13.country      =    .1713344 (mean)
    17.country      =    .1246568 (mean)
    19.country      =    .1147721 (mean)
    20.country      =    .0170236 (mean)
    22.country      =    .0115321 (mean)
    23.country      =    .0318506 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1788372   .0125954    14.20   0.000     .1541507    .
> 2035237
 Patrilineal/Mixed #|
            Female  |  -.1153258   .0126081    -9.15   0.000    -.1400373   -.
> 0906143
  Matrilineal#Male  |   .1269704   .0360756     3.52   0.000     .0562635    .
> 1976774
Matrilineal#Female  |  -.1177628   .0359542    -3.28   0.001    -.1882318   -.
> 0472938
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     34,542

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .5011498 (mean)
                   1.female        =    .4988502 (mean)
                   matlin          =           0
                   1.country       =    .0348178 (mean)
                   2.country       =    .0245182 (mean)
                   3.country       =    .0359514 (mean)
                   5.country       =    .0744615 (mean)
                   6.country       =     .076081 (mean)
                   7.country       =    .0375709 (mean)
                   8.country       =    .0352389 (mean)
                   9.country       =    .0093603 (mean)
                   10.country      =    .0035628 (mean)
                   11.country      =    .0377004 (mean)
                   12.country      =    .0178138 (mean)
                   13.country      =    .0097814 (mean)
                   14.country      =    .0717085 (mean)
                   15.country      =     .037668 (mean)
                   16.country      =    .0458947 (mean)
                   17.country      =    .0500405 (mean)
                   18.country      =    .0752713 (mean)
```

```
                    19.country      =    .0190769 (mean)
                    20.country      =     .073749 (mean)
                    22.country      =    .0326478 (mean)
                    23.country      =    .0348502 (mean)
                    24.country      =    .0307692 (mean)
                    25.country      =    .0346559 (mean)
                    26.country      =    .0221862 (mean)
                    27.country      =    .0370526 (mean)
                    28.country      =    .0375709 (mean)
                1.matlin
                    0.female        =    .5034088 (mean)
                    1.female        =    .4965912 (mean)
                    matlin          =           1
                    3.country       =    .0043632 (mean)
                    10.country      =    .1030815 (mean)
                    12.country      =    .4338696 (mean)
                    13.country      =    .1709845 (mean)
                    17.country      =    .1161713 (mean)
                    19.country      =    .1134442 (mean)
                    20.country      =    .0171803 (mean)
                    22.country      =      .01009 (mean)
                    23.country      =    .0308154 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2870713   .0105787   -27.14   0.000    -.3078051   -.2
> 663375
      Matrilineal   |  -.1943792   .0307588    -6.32   0.000    -.2546653   -.1
> 340931
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -50823.212
Iteration 1:   log likelihood = -50823.211
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,549
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       95.4
                                                              max =      1,746

                                                Wald chi2(28)     =     647.84
Log likelihood = -50823.211                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          z_protest |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |   -.143895   .0109182   -13.18   0.000    -.1652943   -.
> 1224957
                    |
             matlin |
         Matrilineal |  -.1091702   .0457351    -2.39   0.017    -.1988092   -.
> 0195311
                    |
      female#matlin |
Female#Matrilineal |   .0457714   .0294301     1.56   0.120    -.0119106    .
> 1034534
                    |
            country |
           Botswana |   .1036821   .0791267     1.31   0.190    -.0514034    .
> 2587676
       Burkina Faso |    .053407   .0797664     0.67   0.503    -.1029322    .
> 2097463
              Ghana |  -.3709151   .0701093    -5.29   0.000    -.5083268   -.
> 2335034
              Kenya |  -.1779826    .070502    -2.52   0.012    -.3161641   -.
> 0398011
            Lesotho |  -.0160659   .0761213    -0.21   0.833    -.1652609
> .133129
            Liberia |  -.4024195   .0751278    -5.36   0.000    -.5496672   -.
> 2551718
         Madagascar |  -.4600751   .0840321    -5.47   0.000     -.624775   -.
> 2953752
             Malawi |  -.3031189   .0762073    -3.98   0.000    -.4524825   -.
> 1537553
               Mali |  -.1902535   .0748787    -2.54   0.011     -.337013   -.
```

```
> 0434939
       Mozambique |  -.0668121   .0711083    -0.94   0.347    -.2061818    .
> 0725576
          Namibia |   .1559428    .097358     1.60   0.109    -.0348753
> .346761
          Nigeria |  -.2532118    .058232    -4.35   0.000    -.3673445   -.
> 1390792
          Senegal |   .2237616   .0875027     2.56   0.011     .0522594    .
> 3952637
     South Africa |   .1160262    .079717     1.46   0.146    -.0402162    .
> 2722686
         Tanzania |   .2117702   .0653799     3.24   0.001     .0836278    .
> 3399125
           Uganda |  -.1027363   .0681772    -1.51   0.132    -.2363612    .
> 0308886
           Zambia |  -.2554637   .0779126    -3.28   0.001    -.4081697   -.
> 1027578
         Zimbabwe |   -.348606   .0722957    -4.82   0.000     -.490303   -.
> 2069091
     Sierra Leone |  -.2448111   .0808313    -3.03   0.002    -.4032376   -.
> 0863846
            Niger |  -.3238046   .0831298    -3.90   0.000     -.486736   -.
> 1608732
             Togo |   .3102636   .0777836     3.99   0.000     .1578106    .
> 4627166
          Burundi |  -.4598418   .1243023    -3.70   0.000    -.7034698   -.
> 2162138
         Cameroon |  -.1137824   .0748128    -1.52   0.128    -.2604127
> .032848
                  |  -.0271125    .076893    -0.35   0.724      -.17782
> .123595
           Guinea |  -.3442542   .0733898    -4.69   0.000    -.4880956   -.
> 2004129
                  |
            _cons |   .2276782   .0546215     4.17   0.000     .1206221    .
> 3347343
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1485093**	**.0113764**	**.1278051**	**.1725674**
sd(Residual)	**.9677592**	**.0035982**	**.9607324**	**.9748373**

LR test vs. linear model: chibar2(01) = **242.87** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     36,549

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0340765 (mean)
                    2.country       =    .0233088 (mean)
                    3.country       =    .0344565 (mean)
                    5.country       =    .0735369 (mean)
                    6.country       =    .0737902 (mean)
                    7.country       =    .0361667 (mean)
                    8.country       =    .0340132 (mean)
                    9.country       =    .0257791 (mean)
                    10.country      =    .0177983 (mean)
                    11.country      =    .0367368 (mean)
                    12.country      =    .0174183 (mean)
                    13.country      =    .0089308 (mean)
                    14.country      =    .0699899 (mean)
                    15.country      =    .0366734 (mean)
                    16.country      =    .0440841 (mean)
                    17.country      =    .0501647 (mean)
                    18.country      =    .0704332 (mean)
                    19.country      =     .017545 (mean)
                    20.country      =    .0716367 (mean)
                    22.country      =    .0323664 (mean)
                    23.country      =    .0339498 (mean)
                    24.country      =    .0290727 (mean)
                    25.country      =    .0342665 (mean)
                    26.country      =    .0202052 (mean)
                    27.country      =    .0363567 (mean)
                    28.country      =    .0372435 (mean)
                  0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0340707 (mean)
                    2.country       =    .0243453 (mean)
                    3.country       =     .033435 (mean)
                    5.country       =     .073163 (mean)
                    6.country       =    .0730359 (mean)
                    7.country       =    .0361683 (mean)
                    8.country       =    .0347063 (mean)
                    9.country       =    .0249809 (mean)
                    10.country      =    .0188787 (mean)
                    11.country      =    .0369311 (mean)
                    12.country      =     .016654 (mean)
                    13.country      =    .0102975 (mean)
                    14.country      =    .0690313 (mean)
```

```
    15.country      =    .0364226 (mean)
    16.country      =    .0447496 (mean)
    17.country      =    .0478007 (mean)
    18.country      =    .0708747 (mean)
    19.country      =    .0193237 (mean)
    20.country      =    .0720824 (mean)
    22.country      =    .0316552 (mean)
    23.country      =    .0337529 (mean)
    24.country      =    .0298754 (mean)
    25.country      =    .0329265 (mean)
    26.country      =    .0212306 (mean)
    27.country      =    .0362319 (mean)
    28.country      =     .037376 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0035871 (mean)
    10.country      =    .3607015 (mean)
    12.country      =     .308888 (mean)
    13.country      =    .1239538 (mean)
    17.country      =     .079713 (mean)
    19.country      =     .082503 (mean)
    20.country      =    .0127541 (mean)
    22.country      =     .006377 (mean)
    23.country      =    .0215225 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0031746 (mean)
    10.country      =    .3464286 (mean)
    12.country      =    .3107143 (mean)
    13.country      =    .1238095 (mean)
    17.country      =    .0900794 (mean)
    19.country      =    .0821429 (mean)
    20.country      =    .0123016 (mean)
    22.country      =    .0087302 (mean)
    23.country      =     .022619 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .0810129   .0137251     5.90   0.000     .0541121    .
> 1079137
 Patrilineal/Mixed #|
            Female  |  -.0625161   .0137154    -4.56   0.000    -.0893978   -.
> 0356344
  Matrilineal#Male  |  -.0091156   .0381356    -0.24   0.811      -.08386    .
> 0656287
Matrilineal#Female  |  -.1015656   .0377049    -2.69   0.007    -.1754657   -.
> 0276654
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     36,549

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .5008883 (mean)
                   1.female        =    .4991117 (mean)
                   matlin          =           0
                   1.country       =    .0340736 (mean)
                   2.country       =    .0238261 (mean)
                   3.country       =    .0339467 (mean)
                   5.country       =    .0733503 (mean)
                   6.country       =    .0734137 (mean)
                   7.country       =    .0361675 (mean)
                   8.country       =    .0343591 (mean)
                   9.country       =    .0253807 (mean)
                   10.country      =    .0183376 (mean)
                   11.country      =    .0368338 (mean)
                   12.country      =    .0170368 (mean)
                   13.country      =    .0096129 (mean)
                   14.country      =    .0695114 (mean)
                   15.country      =    .0365482 (mean)
                   16.country      =    .0444162 (mean)
                   17.country      =    .0489848 (mean)
                   18.country      =    .0706536 (mean)
```

```
                    19.country      =    .0184327 (mean)
                    20.country      =    .0718591 (mean)
                    22.country      =    .0320114 (mean)
                    23.country      =    .0338515 (mean)
                    24.country      =    .0294734 (mean)
                    25.country      =    .0335977 (mean)
                    26.country      =     .020717 (mean)
                    27.country      =    .0362944 (mean)
                    28.country      =    .0373096 (mean)
                1.matlin
                    0.female        =    .4989063 (mean)
                    1.female        =    .5010937 (mean)
                    matlin          =           1
                    3.country       =    .0033804 (mean)
                    10.country      =    .3535494 (mean)
                    12.country      =    .3098031 (mean)
                    13.country      =    .1238815 (mean)
                    17.country      =    .0849075 (mean)
                    19.country      =    .0823225 (mean)
                    20.country      =    .0125273 (mean)
                    22.country      =    .0075562 (mean)
                    23.country      =     .022072 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |   -.143895   .0109182   -13.18   0.000    -.1652943   -.1
> 224957
      Matrilineal   |  -.0981237   .0273294    -3.59   0.000    -.1516883    -.
> 044559
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -50526.378
Iteration 1:   log likelihood = -50526.378
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,077
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.8
                                                              max =      1,752

                                                Wald chi2(28)     =    1748.37
Log likelihood = -50526.378                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
     z_rally |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
-------------+----------------------------------------------------------------
> -------
      female |
      Female |  -.2526481   .0105439   -23.96   0.000    -.2733138   -.
> 2319824
             |
      matlin |
  Matrilineal |   .0673478   .0443595     1.52   0.129    -.0195952    .
> 1542909
             |
female#matlin |
Female#Matrilineal |    .040951     .02841     1.44   0.149    -.0147316    .
> 0966335
             |
     country |
    Botswana |  -.3783649   .0768507    -4.92   0.000    -.5289894   -.
> 2277403
Burkina Faso |  -.4506282   .0772622    -5.83   0.000    -.6020594   -.
> 2991971
       Ghana |  -.5861176   .0680774    -8.61   0.000    -.7195469   -.
> 4526884
       Kenya |  -.1415702   .0683285    -2.07   0.038    -.2754917   -.
> 0076487
     Lesotho |  -.2690835   .0737754    -3.65   0.000    -.4136806   -.
> 1244864
     Liberia |  -.1965177   .0729405    -2.69   0.007    -.3394786   -.
> 0535569
  Madagascar |   -1.04182   .0811697   -12.84   0.000    -1.200909   -.
> 8827299
      Malawi |  -.1283532   .0738943    -1.74   0.082    -.2731833    .
> 0164769
        Mali |  -.5715214   .0727457    -7.86   0.000    -.7141004   -.
```

```
> 4289424
       Mozambique |  -.5696586   .0687221    -8.29   0.000    -.7043515   -.
> 4349658
         Namibia |  -.5580897   .0948745    -5.88   0.000    -.7440404   -.
> 3721391
         Nigeria |  -.6823612   .0565138   -12.07   0.000    -.7931264   -.
> 5715961
         Senegal |  -.2836836   .0849527    -3.34   0.001    -.4501879   -.
> 1171793
    South Africa |  -.6140876   .0771359    -7.96   0.000    -.7652712    -
> .462904
        Tanzania |   .2737669   .0634947     4.31   0.000     .1493195    .
> 3982143
          Uganda |   .1647571   .0660403     2.49   0.013     .0353205    .
> 2941937
          Zambia |   -.318034   .0753915    -4.22   0.000    -.4657987   -.
> 1702693
        Zimbabwe |   .1156121   .0701116     1.65   0.099    -.0218041    .
> 2530282
    Sierra Leone |  -.2733532   .0784384    -3.48   0.000    -.4270896   -.
> 1196167
           Niger |  -.1189462   .0806391    -1.48   0.140     -.276996    .
> 0391035
            Togo |  -.3532553   .0748411    -4.72   0.000    -.4999411   -.
> 2065695
         Burundi |  -.3159994   .1209198    -2.61   0.009    -.5529979   -.
> 0790009
        Cameroon |  -.4739845   .0723908    -6.55   0.000     -.615868   -.
> 3321011
                 |  -.6199178   .0746703    -8.30   0.000    -.7662688   -.
> 4735668
          Guinea |  -.2460234   .0712881    -3.45   0.001    -.3857454   -.
> 1063014
                 |
           _cons |   .4463922   .0529905     8.42   0.000     .3425327    .
> 5502517
-----------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1446696**	**.010131**	**.1261156**	**.1659532**
sd(Residual)	**.9412308**	**.0034716**	**.9344511**	**.9480597**

LR test vs. linear model: chibar2(01) = **400.74** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,077

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0337402 (mean)
                    2.country       =    .0231612 (mean)
                    3.country       =     .034241 (mean)
                    5.country       =    .0729264 (mean)
                    6.country       =    .0736776 (mean)
                    7.country       =    .0364945 (mean)
                    8.country       =    .0338654 (mean)
                    9.country       =    .0266667 (mean)
                    10.country      =    .0175274 (mean)
                    11.country      =    .0363067 (mean)
                    12.country      =     .017903 (mean)
                    13.country      =    .0087011 (mean)
                    14.country      =    .0697966 (mean)
                    15.country      =    .0366823 (mean)
                    16.country      =    .0441941 (mean)
                    17.country      =    .0495775 (mean)
                    18.country      =    .0726135 (mean)
                    19.country      =    .0177152 (mean)
                    20.country      =    .0711737 (mean)
                    22.country      =    .0320501 (mean)
                    23.country      =    .0338028 (mean)
                    24.country      =    .0292958 (mean)
                    25.country      =    .0339906 (mean)
                    26.country      =    .0208451 (mean)
                    27.country      =    .0361189 (mean)
                    28.country      =    .0369327 (mean)
                  0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0335084 (mean)
                    2.country       =     .024131 (mean)
                    3.country       =    .0346962 (mean)
                    5.country       =    .0722681 (mean)
                    6.country       =    .0734559 (mean)
                    7.country       =    .0364466 (mean)
                    8.country       =    .0345711 (mean)
                    9.country       =    .0253813 (mean)
                    10.country      =    .0187547 (mean)
                    11.country      =    .0361965 (mean)
                    12.country      =    .0176294 (mean)
                    13.country      =     .010065 (mean)
                    14.country      =    .0687672 (mean)
```

```
      15.country      =    .0363216 (mean)
      16.country      =    .0453863 (mean)
      17.country      =    .0470118 (mean)
      18.country      =    .0727682 (mean)
      19.country      =    .0191298 (mean)
      20.country      =    .0712678 (mean)
      22.country      =    .0310078 (mean)
      23.country      =    .0336959 (mean)
      24.country      =    .0303826 (mean)
      25.country      =    .0328832 (mean)
      26.country      =    .0217554 (mean)
      27.country      =    .0357589 (mean)
      28.country      =    .0367592 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035363 (mean)
      10.country      =    .3555992 (mean)
      12.country      =    .3163065 (mean)
      13.country      =    .1237721 (mean)
      17.country      =    .0785855 (mean)
      19.country      =    .0817289 (mean)
      20.country      =    .0125737 (mean)
      22.country      =    .0062868 (mean)
      23.country      =     .021611 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031238 (mean)
      10.country      =    .3420539 (mean)
      12.country      =    .3186255 (mean)
      13.country      =    .1222179 (mean)
      17.country      =    .0890277 (mean)
      19.country      =    .0816087 (mean)
      20.country      =    .0121046 (mean)
      22.country      =    .0085904 (mean)
      23.country      =    .0226474 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1544436   .0133009    11.61   0.000     .1283743    .
> 1805129
 Patrilineal/Mixed #|
            Female  |  -.0987913   .0132809    -7.44   0.000    -.1248214   -.
> 0727611
  Matrilineal#Male  |   .2099277   .0369898     5.68   0.000      .137429    .
> 2824263
Matrilineal#Female  |   .0017911   .0365596     0.05   0.961    -.0698645    .
> 0734467
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,077

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4996716 (mean)
                   1.female        =    .5003284 (mean)
                   matlin          =           0
                   1.country       =    .0336242 (mean)
                   2.country       =    .0236464 (mean)
                   3.country       =    .0344687 (mean)
                   5.country       =     .072597 (mean)
                   6.country       =    .0735667 (mean)
                   7.country       =    .0364706 (mean)
                   8.country       =    .0342185 (mean)
                   9.country       =    .0260236 (mean)
                   10.country      =    .0181414 (mean)
                   11.country      =    .0362516 (mean)
                   12.country      =    .0177661 (mean)
                   13.country      =    .0093835 (mean)
                   14.country      =    .0692815 (mean)
                   15.country      =    .0365018 (mean)
                   16.country      =    .0447906 (mean)
                   17.country      =    .0482938 (mean)
                   18.country      =    .0726909 (mean)
```

```
                   19.country      =    .0184229 (mean)
                   20.country      =    .0712208 (mean)
                   22.country      =    .0315286 (mean)
                   23.country      =    .0337493 (mean)
                   24.country      =    .0298395 (mean)
                   25.country      =    .0334366 (mean)
                   26.country      =    .0213006 (mean)
                   27.country      =    .0359388 (mean)
                   28.country      =    .0368459 (mean)
               1.matlin
                   0.female        =    .4984332 (mean)
                   1.female        =    .5015668 (mean)
                   matlin          =           1
                   3.country       =    .0033294 (mean)
                   10.country      =    .3488053 (mean)
                   12.country      =    .3174696 (mean)
                   13.country      =    .1229926 (mean)
                   17.country      =     .083823 (mean)
                   19.country      =    .0816686 (mean)
                   20.country      =    .0123384 (mean)
                   22.country      =    .0074422 (mean)
                   23.country      =    .0221308 (mean)

------------------------------------------------------------------------------
> ------
                   |            Delta-method
                   |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
-------------------+----------------------------------------------------------
> ------
1.female           |
            matlin |
Patrilineal/Mixed  |  -.2526481   .0105439   -23.96   0.000    -.2733138   -.2
> 319824
       Matrilineal |  -.2116971   .0263808    -8.02   0.000    -.2634025   -.1
> 599918
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -51516.862
Iteration 1:   log likelihood = -51516.862
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,048
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.7
                                                              max =      1,752

                                                Wald chi2(28)     =     989.54
Log likelihood = -51516.862                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
        z_persuade |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
-------------------+----------------------------------------------------------
> -------
            female |
            Female |  -.2564134   .0108403   -23.65   0.000    -.2776599   -.
> 2351669
                   |
            matlin |
       Matrilineal |  -.1411949   .0489205    -2.89   0.004    -.2370774   -.
> 0453124
                   |
     female#matlin |
Female#Matrilineal |   .0829971   .0292048     2.84   0.004     .0257567    .
> 1402374
                   |
           country |
          Botswana |  -.1706539   .0838697    -2.03   0.042    -.3350355   -.
> 0062724
      Burkina Faso |  -.2910672   .0840955    -3.46   0.001    -.4558914   -.
> 1262431
             Ghana |   -.304997   .0737071    -4.14   0.000    -.4494603   -.
> 1605338
             Kenya |  -.0685696   .0747601    -0.92   0.359    -.2150967    .
> 0779574
           Lesotho |  -.0801795   .0806785    -0.99   0.320    -.2383065    .
> 0779475
           Liberia |    .325182   .0796241     4.08   0.000     .1691216    .
> 4812424
        Madagascar |  -.7506297   .0889001    -8.44   0.000    -.9248708   -.
> 5763887
            Malawi |   .0940281   .0800701     1.17   0.240    -.0629064    .
> 2509625
              Mali |  -.1871358   .0788518    -2.37   0.018    -.3416824   -.
```

```
> 0325892
       Mozambique |   .0034964   .0744319     0.05   0.963    -.1423874    .
> 1493801
         Namibia |  -.3631376   .1048159    -3.46   0.001     -.568573   -.
> 1577022
         Nigeria |  -.2701092   .0599569    -4.51   0.000    -.3876225   -.
> 1525959
         Senegal |   .1478993   .0938725     1.58   0.115    -.0360875    .
> 3318861
    South Africa |  -.5655713   .0847865    -6.67   0.000    -.7317498   -.
> 3993928
        Tanzania |  -.2122561   .0688694    -3.08   0.002    -.3472376   -.
> 0772746
          Uganda |   .0916616   .0720471     1.27   0.203    -.0495481    .
> 2328712
          Zambia |   -.308437   .0817494    -3.77   0.000    -.4686628   -.
> 1482112
        Zimbabwe |  -.3354471   .0762257    -4.40   0.000    -.4848467   -.
> 1860476
    Sierra Leone |   .1448909   .0857516     1.69   0.091    -.0231791    .
> 3129609
           Niger |  -.1968518   .0872504    -2.26   0.024    -.3678594   -.
> 0258442
            Togo |  -.4097728   .0807894    -5.07   0.000    -.5681171   -.
> 2514285
         Burundi |  -.3268813   .1375403    -2.38   0.017    -.5964554   -.
> 0573071
        Cameroon |  -.1912037   .0779578    -2.45   0.014    -.3439982   -.
> 0384092
                 |   -.404386   .0808096    -5.00   0.000    -.5627699   -.
> 2460021
          Guinea |  -.1837027   .0764655    -2.40   0.016    -.3335723   -.
> 0338331
                 |
           _cons |   .3428636   .0569943     6.02   0.000     .2311568    .
> 4545703
-----------------+------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.1686965	.011408	.1477556	.1926053
sd(Residual)	.9671361	.0035704	.9601635	.9741593

LR test vs. linear model: chibar2(01) = **478.83** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,048

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0337029 (mean)
                    2.country       =    .0231786 (mean)
                    3.country       =    .0343294 (mean)
                    5.country       =    .0729813 (mean)
                    6.country       =    .0735451 (mean)
                    7.country       =    .0364593 (mean)
                    8.country       =    .0338282 (mean)
                    9.country       =    .0266241 (mean)
                    10.country      =    .0175406 (mean)
                    11.country      =    .0363967 (mean)
                    12.country      =    .0178538 (mean)
                    13.country      =    .0087076 (mean)
                    14.country      =     .069849 (mean)
                    15.country      =    .0367099 (mean)
                    16.country      =    .0442273 (mean)
                    17.country      =    .0496147 (mean)
                    18.country      =     .072668 (mean)
                    19.country      =    .0176032 (mean)
                    20.country      =    .0712899 (mean)
                    22.country      =    .0319489 (mean)
                    23.country      =    .0338282 (mean)
                    24.country      =    .0292552 (mean)
                    25.country      =    .0340788 (mean)
                    26.country      =    .0206728 (mean)
                    27.country      =    .0361461 (mean)
                    28.country      =    .0369605 (mean)
                0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0335377 (mean)
                    2.country       =    .0241522 (mean)
                    3.country       =    .0345389 (mean)
                    5.country       =    .0723314 (mean)
                    6.country       =    .0734576 (mean)
                    7.country       =    .0364785 (mean)
                    8.country       =     .034664 (mean)
                    9.country       =    .0254036 (mean)
                    10.country      =    .0185834 (mean)
                    11.country      =    .0362283 (mean)
                    12.country      =    .0175197 (mean)
                    13.country      =    .0100738 (mean)
                    14.country      =    .0687649 (mean)
```

```
      15.country      =    .0362908 (mean)
      16.country      =    .0454887 (mean)
      17.country      =    .0470529 (mean)
      18.country      =    .0728945 (mean)
      19.country      =     .019084 (mean)
      20.country      =    .0713302 (mean)
      22.country      =    .0309098 (mean)
      23.country      =    .0337254 (mean)
      24.country      =    .0302841 (mean)
      25.country      =     .032912 (mean)
      26.country      =    .0217745 (mean)
      27.country      =    .0357903 (mean)
      28.country      =    .0367288 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035461 (mean)
      10.country      =      .35658 (mean)
      12.country      =    .3148148 (mean)
      13.country      =    .1241135 (mean)
      17.country      =    .0788022 (mean)
      19.country      =    .0815603 (mean)
      20.country      =    .0126084 (mean)
      22.country      =    .0063042 (mean)
      23.country      =    .0216706 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031189 (mean)
      10.country      =    .3415205 (mean)
      12.country      =    .3192982 (mean)
      13.country      =    .1220273 (mean)
      17.country      =    .0892788 (mean)
      19.country      =    .0814815 (mean)
      20.country      =    .0120858 (mean)
      22.country      =     .008577 (mean)
      23.country      =    .0226121 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1592627   .0147173    10.82   0.000     .1304173
> .188108
 Patrilineal/Mixed #|
            Female  |   -.096938   .0146913    -6.60   0.000    -.1257324   -.
> 0681436
  Matrilineal#Male  |   .1407311   .0412039     3.42   0.001      .059973    .
> 2214892
Matrilineal#Female  |  -.0350838   .0406995    -0.86   0.389    -.1148534    .
> 0446858
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,048

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4997026 (mean)
                   1.female        =    .5002974 (mean)
                   matlin          =           0
                   1.country       =    .0336203 (mean)
                   2.country       =    .0236657 (mean)
                   3.country       =    .0344342 (mean)
                   5.country       =    .0726561 (mean)
                   6.country       =    .0735013 (mean)
                   7.country       =    .0364689 (mean)
                   8.country       =    .0342464 (mean)
                   9.country       =    .0260135 (mean)
                   10.country      =    .0180623 (mean)
                   11.country      =    .0363124 (mean)
                   12.country      =    .0176866 (mean)
                   13.country      =    .0093911 (mean)
                   14.country      =    .0693066 (mean)
                   15.country      =    .0365002 (mean)
                   16.country      =    .0448584 (mean)
                   17.country      =    .0483331 (mean)
                   18.country      =    .0727813 (mean)
```

```
                    19.country      =     .018344 (mean)
                    20.country      =    .0713101 (mean)
                    22.country      =     .031429 (mean)
                    23.country      =    .0337768 (mean)
                    24.country      =    .0297699 (mean)
                    25.country      =    .0334951 (mean)
                    26.country      =     .021224 (mean)
                    27.country      =    .0359681 (mean)
                    28.country      =    .0368446 (mean)
                1.matlin
                    0.female        =    .4973545 (mean)
                    1.female        =    .5026455 (mean)
                    matlin          =           1
                    3.country       =    .0033314 (mean)
                    10.country      =    .3490104 (mean)
                    12.country      =    .3170684 (mean)
                    13.country      =    .1230649 (mean)
                    17.country      =    .0840682 (mean)
                    19.country      =    .0815207 (mean)
                    20.country      =    .0123457 (mean)
                    22.country      =    .0074466 (mean)
                    23.country      =    .0221438 (mean)

-------------------+----------------------------------------------------------------
> ------
                   |            Delta-method
                   |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
-------------------+----------------------------------------------------------------
> ------
1.female           |
            matlin |
Patrilineal/Mixed  |  -.2564134   .0108403   -23.65   0.000    -.2776599   -.2
> 351669
      Matrilineal  |  -.1734163   .0271179    -6.39   0.000    -.2265665   -.1
> 202662
-------------------+----------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -51813.093
Iteration 1:   log likelihood = -51813.093
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,037
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.7
                                                              max =      1,752

                                                Wald chi2(28)     =    1119.35
Log likelihood = -51813.093                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
        z_campaign |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
-------------------+----------------------------------------------------------
> -------
            female |
            Female |  -.2818482   .0109365   -25.77   0.000    -.3032833   -.
> 2604131
                   |
            matlin |
       Matrilineal |  -.1268017   .0473582    -2.68   0.007     -.219622   -.
> 0339814
                   |
     female#matlin |
Female#Matrilineal |   .0421821    .029466     1.43   0.152    -.0155702    .
> 0999344
                   |
           country |
          Botswana |  -.4176873   .0816926    -5.11   0.000    -.5778018   -.
> 2575728
      Burkina Faso |  -.1942511   .0820478    -2.37   0.018    -.3550619   -.
> 0334403
             Ghana |  -.4221266    .072141    -5.85   0.000    -.5635203   -.
> 2807329
             Kenya |  -.3580099    .072717    -4.92   0.000    -.5005326   -.
> 2154872
           Lesotho |  -.4099268   .0784963    -5.22   0.000    -.5637768   -.
> 2560769
           Liberia |   .0304272   .0775399     0.39   0.695    -.1215483    .
> 1824027
        Madagascar |   -.646957   .0864073    -7.49   0.000    -.8163123   -.
> 4776017
            Malawi |    .179894   .0783576     2.30   0.022     .0263159    .
> 3334722
              Mali |  -.1069142   .0771249    -1.39   0.166    -.2580762    .
```

```
> 0442477
       Mozambique |   .0335742   .0728432     0.46   0.645     -.109196    .
> 1763443
         Namibia |   -.574861   .1014037    -5.67   0.000    -.7736086   -.
> 3761134
         Nigeria |  -.3353312   .0593881    -5.65   0.000    -.4517297   -.
> 2189326
         Senegal |    .117918   .0907777     1.30   0.194    -.0600029    .
> 2958389
    South Africa |  -.5307982   .0822563    -6.45   0.000    -.6920175   -.
> 3695788
        Tanzania |   -.338664   .0673221    -5.03   0.000    -.4706129   -.
> 2067152
          Uganda |   -.054409   .0701945    -0.78   0.438    -.1919878    .
> 0831698
          Zambia |  -.4112039   .0799697    -5.14   0.000    -.5679417   -.
> 2544661
        Zimbabwe |  -.3895613   .0744352    -5.23   0.000    -.5354515   -.
> 2436711
    Sierra Leone |   .0217157   .0834395     0.26   0.795    -.1418228    .
> 1852542
           Niger |   .0239828   .0854527     0.28   0.779    -.1435014
> .191467
            Togo |   -.275158   .0791528    -3.48   0.001    -.4302946   -.
> 1200214
         Burundi |  -.2533151   .1308003    -1.94   0.053     -.509679    .
> 0030487
        Cameroon |   -.218339   .0765434    -2.85   0.004    -.3683612   -.
> 0683168
                 |  -.3319371    .079118    -4.20   0.000    -.4870056   -.
> 1768687
          Guinea |  -.1435282   .0752622    -1.91   0.057    -.2910395    .
> 0039831
                 |
           _cons |   .4121821   .0559969     7.36   0.000     .3024302    .
> 5219341
-----------------+------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1582191**	**.0109087**	**.1382201**	**.1811118**
sd(Residual)	**.9756762**	**.0036014**	**.9686431**	**.9827604**

LR test vs. linear model: chibar2(01) = **440.26** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,037

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0337093 (mean)
                    2.country       =    .0231203 (mean)
                    3.country       =    .0342732 (mean)
                    5.country       =     .072995 (mean)
                    6.country       =    .0736842 (mean)
                    7.country       =    .0365288 (mean)
                    8.country       =    .0338346 (mean)
                    9.country       =    .0266291 (mean)
                    10.country      =    .0175439 (mean)
                    11.country      =    .0364035 (mean)
                    12.country      =    .0177945 (mean)
                    13.country      =    .0086466 (mean)
                    14.country      =    .0698622 (mean)
                    15.country      =    .0367168 (mean)
                    16.country      =    .0441729 (mean)
                    17.country      =    .0496241 (mean)
                    18.country      =    .0726817 (mean)
                    19.country      =    .0176065 (mean)
                    20.country      =    .0713033 (mean)
                    22.country      =    .0319549 (mean)
                    23.country      =    .0338346 (mean)
                    24.country      =     .029198 (mean)
                    25.country      =    .0340852 (mean)
                    26.country      =     .020802 (mean)
                    27.country      =    .0360902 (mean)
                    28.country      =    .0369048 (mean)
               0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0335503 (mean)
                    2.country       =    .0241612 (mean)
                    3.country       =    .0346144 (mean)
                    5.country       =    .0723585 (mean)
                    6.country       =    .0734226 (mean)
                    7.country       =    .0363671 (mean)
                    8.country       =    .0345518 (mean)
                    9.country       =    .0254131 (mean)
                    10.country      =      .01834 (mean)
                    11.country      =    .0363045 (mean)
                    12.country      =    .0175263 (mean)
                    13.country      =    .0100776 (mean)
                    14.country      =    .0688533 (mean)
```

```
    15.country      =    .0363045 (mean)
    16.country      =    .0455058 (mean)
    17.country      =    .0470706 (mean)
    18.country      =    .0728593 (mean)
    19.country      =    .0190911 (mean)
    20.country      =     .071357 (mean)
    22.country      =    .0309214 (mean)
    23.country      =    .0337381 (mean)
    24.country      =    .0304832 (mean)
    25.country      =    .0329244 (mean)
    26.country      =    .0217201 (mean)
    27.country      =    .0358037 (mean)
    28.country      =      .03668 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0035405 (mean)
    10.country      =    .3552321 (mean)
    12.country      =    .3162864 (mean)
    13.country      =    .1239182 (mean)
    17.country      =    .0786782 (mean)
    19.country      =    .0818253 (mean)
    20.country      =    .0125885 (mean)
    22.country      =    .0062943 (mean)
    23.country      =    .0216365 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0031262 (mean)
    10.country      =    .3411489 (mean)
    12.country      =    .3192653 (mean)
    13.country      =    .1223134 (mean)
    17.country      =    .0890973 (mean)
    19.country      =    .0816725 (mean)
    20.country      =    .0121141 (mean)
    22.country      =    .0085971 (mean)
    23.country      =    .0226651 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1670899   .0142207    11.75   0.000     .1392178    .
> 1949621
 Patrilineal/Mixed #|
            Female  |  -.1150516   .0141991    -8.10   0.000    -.1428813   -.
> 0872218
  Matrilineal#Male  |   .2234394   .0396569     5.63   0.000     .1457132    .
> 3011655
Matrilineal#Female  |  -.0208635   .0391924    -0.53   0.594    -.0976791    .
> 0559521
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,037

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4997495 (mean)
                   1.female        =    .5002505 (mean)
                   matlin          =           0
                   1.country       =    .0336298 (mean)
                   2.country       =     .023641 (mean)
                   3.country       =    .0344439 (mean)
                   5.country       =    .0726766 (mean)
                   6.country       =    .0735534 (mean)
                   7.country       =    .0364479 (mean)
                   8.country       =    .0341934 (mean)
                   9.country       =    .0260208 (mean)
                   10.country      =    .0179421 (mean)
                   11.country      =     .036354 (mean)
                   12.country      =    .0176603 (mean)
                   13.country      =    .0093625 (mean)
                   14.country      =    .0693575 (mean)
                   15.country      =    .0365105 (mean)
                   16.country      =    .0448397 (mean)
                   17.country      =    .0483467 (mean)
                   18.country      =    .0727705 (mean)
```

```
                    19.country      =    .0183492 (mean)
                    20.country      =    .0713302 (mean)
                    22.country      =    .0314379 (mean)
                    23.country      =    .0337863 (mean)
                    24.country      =    .0298409 (mean)
                    25.country      =    .0335045 (mean)
                    26.country      =    .0212613 (mean)
                    27.country      =    .0359469 (mean)
                    28.country      =    .0367923 (mean)
                1.matlin
                    0.female        =    .4983337 (mean)
                    1.female        =    .5016663 (mean)
                    matlin          =           1
                    3.country       =    .0033327 (mean)
                    10.country      =     .348167 (mean)
                    12.country      =    .3177808 (mean)
                    13.country      =    .1231131 (mean)
                    17.country      =    .0839051 (mean)
                    19.country      =    .0817487 (mean)
                    20.country      =    .0123505 (mean)
                    22.country      =    .0074495 (mean)
                    23.country      =    .0221525 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2818482   .0109365   -25.77   0.000    -.3032833   -.2
> 604131
      Matrilineal   |  -.2396661   .0273608    -8.76   0.000    -.2932922     -
> .18604
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -50173.483
Iteration 1:   log likelihood = -50173.483
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,048
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.7
                                                              max =      1,748

                                                Wald chi2(28)     =    1420.96
Log likelihood = -50173.483                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          z_meeting |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |  -.2473066   .0104533   -23.66   0.000    -.2677947   -.
> 2268185
                    |
             matlin |
         Matrilineal |   -.185335    .047528    -3.90   0.000    -.2784881   -.
> 0921818
                    |
      female#matlin |
Female#Matrilineal |   .1308959   .0281616     4.65   0.000     .0757001    .
> 1860917
                    |
            country |
           Botswana |  -.0589745   .0813431    -0.73   0.468     -.218404
> .100455
       Burkina Faso |   .0724098   .0815456     0.89   0.375    -.0874165    .
> 2322362
              Ghana |  -.3046085   .0714261    -4.26   0.000    -.4446011   -.
> 1646159
              Kenya |  -.0068843   .0726139    -0.09   0.924    -.1492049    .
> 1354363
            Lesotho |   .3945234   .0783434     5.04   0.000     .2409732    .
> 5480735
            Liberia |   .0574042   .0772196     0.74   0.457    -.0939434    .
> 2087519
         Madagascar |  -.5844267   .0862848    -6.77   0.000    -.7535419   -.
> 4153116
             Malawi |   .6643796   .0776003     8.56   0.000     .5122858    .
> 8164734
               Mali |  -.0356967   .0764097    -0.47   0.640     -.185457    .
```

```
> 1140637
       Mozambique |    .320214   .0721547     4.44   0.000     .1787933    .
> 4616347
          Namibia |  -.2083785   .1015026    -2.05   0.040    -.4073199    -
> .009437
          Nigeria |  -.4677662   .0579792    -8.07   0.000    -.5814034   -.
> 3541291
          Senegal |    .302202   .0911624     3.31   0.001      .123527
> .480877
     South Africa |   -.184041    .082289    -2.24   0.025    -.3453245   -.
> 0227574
         Tanzania |   .4176159   .0667456     6.26   0.000     .2867968    .
> 5484349
           Uganda |   .0723941   .0699128     1.04   0.300    -.0646325    .
> 2094208
           Zambia |   -.142888    .079165    -1.80   0.071    -.2980485    .
> 0122725
         Zimbabwe |   .1974901   .0739002     2.67   0.008     .0526484    .
> 3423318
     Sierra Leone |   .0230733   .0830987     0.28   0.781    -.1397971    .
> 1859437
            Niger |  -.1739926   .0845645    -2.06   0.040     -.339736   -.
> 0082492
             Togo |  -.0222785   .0781388    -0.29   0.776    -.1754278    .
> 1308708
          Burundi |   .3761158   .1339679     2.81   0.005     .1135436    .
> 6386881
         Cameroon |  -.0312869    .075485    -0.41   0.679    -.1792347
> .116661
                  |   .2858503   .0783012     3.65   0.000     .1323828    .
> 4393178
           Guinea |   .2558935   .0740146     3.46   0.001     .1108276    .
> 4009594
                  |
            _cons |   .1277383   .0551799     2.31   0.021     .0195877    .
> 2358889
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.1646977	.0113022	.1439709	.1884085
sd(Residual)	.932634	.0034438	.9259086	.9394082

LR test vs. linear model: chibar2(01) = **461.88** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,048

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0337592 (mean)
                    2.country       =    .0232369 (mean)
                    3.country       =    .0345108 (mean)
                    5.country       =    .0728423 (mean)
                    6.country       =    .0734686 (mean)
                    7.country       =    .0363898 (mean)
                    8.country       =    .0340724 (mean)
                    9.country       =    .0265564 (mean)
                    10.country      =    .0175999 (mean)
                    11.country      =    .0364525 (mean)
                    12.country      =    .0178504 (mean)
                    13.country      =    .0088939 (mean)
                    14.country      =    .0697733 (mean)
                    15.country      =    .0366404 (mean)
                    16.country      =    .0443442 (mean)
                    17.country      =     .049668 (mean)
                    18.country      =    .0721533 (mean)
                    19.country      =    .0177252 (mean)
                    20.country      =    .0712138 (mean)
                    22.country      =    .0319429 (mean)
                    23.country      =    .0337592 (mean)
                    24.country      =    .0290618 (mean)
                    25.country      =     .034135 (mean)
                    26.country      =    .0207942 (mean)
                    27.country      =    .0361393 (mean)
                    28.country      =    .0370162 (mean)
                  0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =     .033544 (mean)
                    2.country       =    .0242193 (mean)
                    3.country       =    .0349834 (mean)
                    5.country       =    .0720946 (mean)
                    6.country       =    .0730959 (mean)
                    7.country       =    .0363602 (mean)
                    8.country       =    .0346079 (mean)
                    9.country       =    .0257213 (mean)
                    10.country      =    .0187746 (mean)
                    11.country      =    .0363602 (mean)
                    12.country      =    .0174604 (mean)
                    13.country      =    .0102635 (mean)
                    14.country      =    .0688404 (mean)
```

```
      15.country      =    .0360473 (mean)
      16.country      =    .0454972 (mean)
      17.country      =    .0471244 (mean)
      18.country      =    .0717817 (mean)
      19.country      =    .0191501 (mean)
      20.country      =    .0713436 (mean)
      22.country      =    .0311659 (mean)
      23.country      =    .0336066 (mean)
      24.country      =    .0304775 (mean)
      25.country      =    .0329808 (mean)
      26.country      =    .0217786 (mean)
      27.country      =    .0358596 (mean)
      28.country      =    .0368609 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035419 (mean)
      10.country      =    .3569461 (mean)
      12.country      =    .3152302 (mean)
      13.country      =    .1239669 (mean)
      17.country      =    .0787092 (mean)
      19.country      =    .0810704 (mean)
      20.country      =    .0125935 (mean)
      22.country      =    .0062967 (mean)
      23.country      =     .021645 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031226 (mean)
      10.country      =    .3415301 (mean)
      12.country      =    .3192818 (mean)
      13.country      =    .1225605 (mean)
      17.country      =     .088993 (mean)
      19.country      =    .0815769 (mean)
      20.country      =    .0120999 (mean)
      22.country      =    .0081967 (mean)
      23.country      =    .0226386 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
             Male   |   .1551969   .0142993    10.85   0.000     .1271707    .
> 1832231
 Patrilineal/Mixed #|
           Female   |  -.0928523    .014274    -6.51   0.000    -.1208287   -.
> 0648758
  Matrilineal#Male  |   .2750691   .0400508     6.87   0.000     .1965709    .
> 3535673
Matrilineal#Female  |   .1539722   .0395759     3.89   0.000     .0764049    .
> 2315395
--------------------+---------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,048

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4997965 (mean)
                    1.female        =    .5002035 (mean)
                    matlin          =           0
                    1.country       =    .0336516 (mean)
                    2.country       =    .0237283 (mean)
                    3.country       =    .0347472 (mean)
                    5.country       =    .0724683 (mean)
                    6.country       =    .0732822 (mean)
                    7.country       =     .036375 (mean)
                    8.country       =    .0343403 (mean)
                    9.country       =    .0261387 (mean)
                    10.country      =    .0181875 (mean)
                    11.country      =    .0364063 (mean)
                    12.country      =    .0176553 (mean)
                    13.country      =     .009579 (mean)
                    14.country      =    .0693066 (mean)
                    15.country      =    .0363437 (mean)
                    16.country      =     .044921 (mean)
                    17.country      =    .0483957 (mean)
                    18.country      =    .0719674 (mean)
```

```
                    19.country      =    .0184379 (mean)
                    20.country      =    .0712788 (mean)
                    22.country      =    .0315542 (mean)
                    23.country      =    .0336829 (mean)
                    24.country      =    .0297699 (mean)
                    25.country      =    .0335577 (mean)
                    26.country      =    .0212866 (mean)
                    27.country      =    .0359994 (mean)
                    28.country      =    .0369385 (mean)
                1.matlin
                    0.female        =    .4979424 (mean)
                    1.female        =    .5020576 (mean)
                    matlin          =           1
                    3.country       =    .0033314 (mean)
                    10.country      =    .3492063 (mean)
                    12.country      =    .3172644 (mean)
                    13.country      =    .1232608 (mean)
                    17.country      =    .0838722 (mean)
                    19.country      =    .0813247 (mean)
                    20.country      =    .0123457 (mean)
                    22.country      =    .0072506 (mean)
                    23.country      =    .0221438 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2473066   .0104533   -23.66   0.000    -.2677947   -.2
> 268185
      Matrilineal   |  -.1164107   .0261492    -4.45   0.000    -.1676623   -.0
> 651591
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -51206.222
Iteration 1:   log likelihood = -51206.222
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,941
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.5
                                                              max =      1,740

                                                Wald chi2(28)     =     840.43
Log likelihood = -51206.222                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          z_commorg |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |  -.1691949   .0108047   -15.66   0.000    -.1903718    -
> .148018
                    |
             matlin |
         Matrilineal |  -.1668676   .0486765    -3.43   0.001    -.2622717   -.
> 0714634
                    |
      female#matlin |
Female#Matrilineal |   .0795005   .0291693     2.73   0.006     .0223296    .
> 1366713
                    |
            country |
           Botswana |   -.353315   .0833525    -4.24   0.000     -.516683   -.
> 1899471
       Burkina Faso |   .0151775   .0836107     0.18   0.856    -.1486965    .
> 1790515
              Ghana |  -.1270261   .0732664    -1.73   0.083    -.2706256    .
> 0165735
              Kenya |   .4467089   .0743098     6.01   0.000     .3010645    .
> 5923534
            Lesotho |  -.0908522   .0802175    -1.13   0.257    -.2480756    .
> 0663713
            Liberia |   .4667789   .0792219     5.89   0.000     .3115068
> .622051
         Madagascar |  -.4641324   .0882874    -5.26   0.000    -.6371725   -.
> 2910922
             Malawi |   .1555535    .079652     1.95   0.051    -.0005617    .
> 3116686
               Mali |   .4348647   .0783587     5.55   0.000     .2812845    .
```

```
> 5884449
       Mozambique |   .0110911   .0740859     0.15   0.881    -.1341146    .
> 1562968
         Namibia |  -.2675584   .1040342    -2.57   0.010    -.4714617   -.
> 0636551
         Nigeria |   .0181737   .0596304     0.30   0.761    -.0986997    .
> 1350471
         Senegal |   .3815253   .0932685     4.09   0.000     .1987223    .
> 5643283
    South Africa |  -.1842252   .0843315    -2.18   0.029    -.3495119   -.
> 0189385
        Tanzania |   .3442872   .0684342     5.03   0.000     .2101585    .
> 4784158
          Uganda |   .1719141   .0715942     2.40   0.016      .031592    .
> 3122363
          Zambia |  -.0327195   .0812765    -0.40   0.687    -.1920184    .
> 1265794
        Zimbabwe |  -.0640799   .0758065    -0.85   0.398     -.212658    .
> 0844981
    Sierra Leone |   .3201696   .0851966     3.76   0.000     .1531872    .
> 4871519
           Niger |  -.2517552   .0867373    -2.90   0.004    -.4217571   -.
> 0817533
            Togo |    .116285   .0799819     1.45   0.146    -.0404767    .
> 2730467
         Burundi |  -.0142495   .1365887    -0.10   0.917    -.2819584    .
> 2534595
        Cameroon |   .2728488    .077459     3.52   0.000      .121032    .
> 4246657
                 |   .2543927   .0803188     3.17   0.002     .0969708    .
> 4118145
          Guinea |   .5023522   .0760096     6.61   0.000     .3533761    .
> 6513282
                 |
           _cons |   .0370474   .0566222     0.65   0.513    -.0739302    .
> 1480249
-----------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1674748**	**.0114828**	**.1464156**	**.191563**
sd(Residual)	**.9629166**	**.0035604**	**.9559635**	**.9699202**

LR test vs. linear model: chibar2(01) = **446.18** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     36,941

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .0338377 (mean)
                    2.country       =    .0231653 (mean)
                    3.country       =    .0344654 (mean)
                    5.country       =    .0724465 (mean)
                    6.country       =    .0734509 (mean)
                    7.country       =    .0364744 (mean)
                    8.country       =     .033461 (mean)
                    9.country       =    .0267437 (mean)
                    10.country      =    .0176408 (mean)
                    11.country      =    .0365371 (mean)
                    12.country      =     .017578 (mean)
                    13.country      =    .0089773 (mean)
                    14.country      =     .069747 (mean)
                    15.country      =    .0367882 (mean)
                    16.country      =    .0437567 (mean)
                    17.country      =    .0497834 (mean)
                    18.country      =    .0726976 (mean)
                    19.country      =    .0176408 (mean)
                    20.country      =    .0710026 (mean)
                    22.country      =    .0320799 (mean)
                    23.country      =    .0339632 (mean)
                    24.country      =    .0294432 (mean)
                    25.country      =    .0342143 (mean)
                    26.country      =    .0207797 (mean)
                    27.country      =     .036286 (mean)
                    28.country      =    .0370394 (mean)
               0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =    .0336156 (mean)
                    2.country       =    .0242082 (mean)
                    3.country       =    .0348071 (mean)
                    5.country       =    .0717466 (mean)
                    6.country       =    .0736281 (mean)
                    7.country       =    .0365632 (mean)
                    8.country       =    .0342427 (mean)
                    9.country       =    .0257761 (mean)
                    10.country      =    .0188147 (mean)
                    11.country      =    .0365005 (mean)
                    12.country      =    .0173722 (mean)
                    13.country      =    .0102226 (mean)
                    14.country      =     .068799 (mean)
```

```
    15.country      =     .036375 (mean)
    16.country      =    .0449671 (mean)
    17.country      =    .0470994 (mean)
    18.country      =    .0728128 (mean)
    19.country      =    .0190028 (mean)
    20.country      =    .0708059 (mean)
    22.country      =    .0309815 (mean)
    23.country      =    .0338037 (mean)
    24.country      =    .0302289 (mean)
    25.country      =    .0330511 (mean)
    26.country      =     .021825 (mean)
    27.country      =     .035936 (mean)
    28.country      =     .036814 (mean)
1.matlin#0.female
    female          =           0
    matlin          =           1
    3.country       =    .0035615 (mean)
    10.country      =    .3577364 (mean)
    12.country      =    .3134151 (mean)
    13.country      =     .124258 (mean)
    17.country      =    .0791452 (mean)
    19.country      =    .0811239 (mean)
    20.country      =    .0126632 (mean)
    22.country      =    .0063316 (mean)
    23.country      =    .0217649 (mean)
1.matlin#1.female
    female          =           1
    matlin          =           1
    3.country       =    .0031496 (mean)
    10.country      =    .3429134 (mean)
    12.country      =    .3153543 (mean)
    13.country      =     .123622 (mean)
    17.country      =    .0897638 (mean)
    19.country      =    .0814961 (mean)
    20.country      =    .0122047 (mean)
    22.country      =    .0086614 (mean)
    23.country      =    .0228346 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1392296    .014636     9.51   0.000     .1105435    .
> 1679157
 Patrilineal/Mixed #|
            Female  |  -.0309781   .0146059    -2.12   0.034    -.0596052    -
> .002351
  Matrilineal#Male  |  -.0835585    .040991    -2.04   0.042    -.1638994   -.
> 0032177
Matrilineal#Female  |  -.1712236   .0405105    -4.23   0.000    -.2506227   -.
> 0918246
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     36,941

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =     .499749 (mean)
                   1.female        =     .500251 (mean)
                   matlin          =           0
                   1.country       =    .0337265 (mean)
                   2.country       =     .023687 (mean)
                   3.country       =    .0346364 (mean)
                   5.country       =    .0720964 (mean)
                   6.country       =    .0735396 (mean)
                   7.country       =    .0365188 (mean)
                   8.country       =     .033852 (mean)
                   9.country       =    .0262596 (mean)
                   10.country      =     .018228 (mean)
                   11.country      =    .0365188 (mean)
                   12.country      =    .0174751 (mean)
                   13.country      =    .0096003 (mean)
                   14.country      =    .0692728 (mean)
                   15.country      =    .0365815 (mean)
                   16.country      =    .0443622 (mean)
                   17.country      =    .0484407 (mean)
                   18.country      =    .0727552 (mean)
```

```
                    19.country      =    .0183221 (mean)
                    20.country      =    .0709042 (mean)
                    22.country      =    .0315304 (mean)
                    23.country      =    .0338834 (mean)
                    24.country      =    .0298362 (mean)
                    25.country      =    .0336324 (mean)
                    26.country      =    .0213026 (mean)
                    27.country      =    .0361109 (mean)
                    28.country      =    .0369266 (mean)
                1.matlin
                    0.female        =    .4987172 (mean)
                    1.female        =    .5012828 (mean)
                    matlin          =           1
                    3.country       =     .003355 (mean)
                    10.country      =    .3503059 (mean)
                    12.country      =    .3143872 (mean)
                    13.country      =    .1239392 (mean)
                    17.country      =    .0844681 (mean)
                    19.country      =    .0813104 (mean)
                    20.country      =    .0124334 (mean)
                    22.country      =    .0074995 (mean)
                    23.country      =    .0223012 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.1691949   .0108047   -15.66   0.000    -.1903718    -.
> 148018
      Matrilineal   |  -.0896944    .027094    -3.31   0.001    -.1427976   -.0
> 365912
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:
```

```
Iteration 0:   log likelihood = -52341.166
Iteration 1:   log likelihood = -52340.968
Iteration 2:   log likelihood = -52340.967

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,878
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.3
                                                              max =      1,736

                                                Wald chi2(28)     =     733.48
Log likelihood = -52340.967                     Prob > chi2       =     0.0000
```

z_leader	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
female					
Female	-.1548865	.0112048	-13.82	0.000	-.1768475 -.1329254
matlin					
Matrilineal	-.167287	.0352702	-4.74	0.000	-.2364152 -.0981587
female#matlin					
Female#Matrilineal	.0800189	.0302422	2.65	0.008	.0207452 .1392926
country					
Botswana	-.148318	.0623366	-2.38	0.017	-.2704954 -.0261406
Burkina Faso	.0685272	.0624088	1.10	0.272	-.0537917 .1908461
Ghana	-.0891925	.0554731	-1.61	0.108	-.1979178 .0195327
Kenya	.1877515	.0537152	3.50	0.000	.0824716 .2930314
Lesotho	-.0840365	.0586905	-1.43	0.152	-.1990678 .0309948
Liberia	.2534457	.0586578	4.32	0.000	.1384787 .3684128
Madagascar	-.1751255	.064193	-2.73	0.006	-.3009414 -.

```
> 0493096
           Malawi |   .5699251   .0595022     9.58   0.000     .4533028    .
> 6865473
             Mali |    .222875   .0590961     3.77   0.000     .1070489    .
> 3387012
       Mozambique |   .0132633   .0566684     0.23   0.815    -.0978046    .
> 1243313
          Namibia |  -.1510493   .0714779    -2.11   0.035    -.2911434   -.
> 0109552
          Nigeria |   .0236675   .0500841     0.47   0.637    -.0744955    .
> 1218306
          Senegal |   .3126246   .0640288     4.88   0.000     .1871305    .
> 4381187
     South Africa |   -.169926   .0593395    -2.86   0.004    -.2862294   -.
> 0536227
         Tanzania |   .1711793     .05219     3.28   0.001     .0688888    .
> 2734699
           Uganda |   .1235693   .0527409     2.34   0.019      .020199    .
> 2269396
           Zambia |   .1815272   .0618715     2.93   0.003     .0602613    .
> 3027931
         Zimbabwe |   .0244061   .0554883     0.44   0.660    -.0843489    .
> 1331612
     Sierra Leone |   .2042895   .0625294     3.27   0.001     .0817341    .
> 3268449
            Niger |  -.1570013   .0642507    -2.44   0.015    -.2829303   -.
> 0310723
             Togo |   .1548806    .062026     2.50   0.013      .033312    .
> 2764493
          Burundi |   .1010998    .079528     1.27   0.204    -.0547721    .
> 2569718
         Cameroon |   .0907641   .0621246     1.46   0.144     -.030998    .
> 2125261
                  |   .1447166   .0608202     2.38   0.017     .0255112
> .263922
           Guinea |   .3498425   .0598534     5.84   0.000     .2325319    .
> 4671531
                  |
            _cons |   .0031945   .0442008     0.07   0.942    -.0834375    .
> 0898265
------------------+------------------------------------------------------------

> ------
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.0776549**	**.0092252**	**.0615246**	**.0980142**
sd(Residual)	**.9985209**	**.0036899**	**.991315**	**1.005779**

LR test vs. linear model: chibar2(01) = **53.67** Prob >= chibar2 = **0.0000**

Adjusted predictions Number of obs = **36,878**

Expression : **Linear prediction, fixed portion, predict()**
over : **matlin female**
at : 0.matlin#0.female

female	=	**0**	
matlin	=	**0**	
1.country	=	**.0338994**	(mean)
2.country	=	**.0232075**	(mean)
3.country	=	**.0345283**	(mean)
5.country	=	**.0725786**	(mean)
6.country	=	**.0733962**	(mean)
7.country	=	**.0363522**	(mean)
8.country	=	**.0334591**	(mean)
9.country	=	**.0266038**	(mean)
10.country	=	**.017673**	(mean)
11.country	=	**.0366038**	(mean)
12.country	=	**.0176101**	(mean)
13.country	=	**.0089937**	(mean)
14.country	=	**.0698113**	(mean)
15.country	=	**.0368553**	(mean)
16.country	=	**.0437107**	(mean)
17.country	=	**.0496855**	(mean)
18.country	=	**.0728302**	(mean)
19.country	=	**.017673**	(mean)
20.country	=	**.0706918**	(mean)
22.country	=	**.0320755**	(mean)
23.country	=	**.0339623**	(mean)
24.country	=	**.029434**	(mean)
25.country	=	**.0342767**	(mean)
26.country	=	**.0207547**	(mean)
27.country	=	**.0362893**	(mean)
28.country	=	**.037044**	(mean)
0.matlin#1.female			
female	=	**1**	
matlin	=	**0**	
1.country	=	**.0336789**	(mean)
2.country	=	**.0242538**	(mean)
3.country	=	**.0348099**	(mean)

```
        5.country       =     .071819 (mean)
        6.country       =    .0734527 (mean)
        7.country       =    .0365064 (mean)
        8.country       =    .0343073 (mean)
        9.country       =    .0257619 (mean)
        10.country      =    .0188501 (mean)
        11.country      =    .0365693 (mean)
        12.country      =     .017405 (mean)
        13.country      =    .0101791 (mean)
        14.country      =    .0689287 (mean)
        15.country      =    .0363808 (mean)
        16.country      =    .0448005 (mean)
        17.country      =    .0471254 (mean)
        18.country      =       .07295 (mean)
        19.country      =    .0189758 (mean)
        20.country      =    .0706252 (mean)
        22.country      =    .0310399 (mean)
        23.country      =    .0338046 (mean)
        24.country      =    .0302231 (mean)
        25.country      =    .0331134 (mean)
        26.country      =    .0218033 (mean)
        27.country      =    .0357524 (mean)
        28.country      =    .0368834 (mean)
1.matlin#0.female
        female          =           0
        matlin          =           1
        3.country       =    .0035644 (mean)
        10.country      =    .3576238 (mean)
        12.country      =    .3136634 (mean)
        13.country      =    .1243564 (mean)
        17.country      =    .0788119 (mean)
        19.country      =    .0811881 (mean)
        20.country      =    .0126733 (mean)
        22.country      =    .0063366 (mean)
        23.country      =    .0217822 (mean)
1.matlin#1.female
        female          =           1
        matlin          =           1
        3.country       =    .0031521 (mean)
        10.country      =    .3431836 (mean)
        12.country      =    .3148148 (mean)
        13.country      =    .1237195 (mean)
        17.country      =    .0898345 (mean)
        19.country      =    .0815603 (mean)
        20.country      =    .0122143 (mean)
        22.country      =    .0086682 (mean)
        23.country      =    .0228526 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .0848213   .0103886     8.16   0.000     .0644601    .
> 1051825
 Patrilineal/Mixed #|
            Female  |  -.0700557    .010371    -6.75   0.000    -.0903825   -.
> 0497289
  Matrilineal#Male  |   .0517596   .0276654     1.87   0.061    -.0024636    .
> 1059829
Matrilineal#Female  |   -.029003   .0273758    -1.06   0.289    -.0826587    .
> 0246526
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     36,878

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .4997643 (mean)
                   1.female        =    .5002357 (mean)
                   matlin          =           0
                   1.country       =    .0337891 (mean)
                   2.country       =    .0237309 (mean)
                   3.country       =    .0346692 (mean)
                   5.country       =    .0721986 (mean)
                   6.country       =    .0734245 (mean)
                   7.country       =    .0364294 (mean)
                   8.country       =    .0338834 (mean)
                   9.country       =    .0261826 (mean)
                   10.country      =    .0182618 (mean)
                   11.country      =    .0365865 (mean)
                   12.country      =    .0175075 (mean)
                   13.country      =    .0095867 (mean)
                   14.country      =    .0693698 (mean)
                   15.country      =    .0366179 (mean)
                   16.country      =    .0442559 (mean)
                   17.country      =    .0484048 (mean)
                   18.country      =    .0728901 (mean)
```

```
                    19.country      =    .0183247 (mean)
                    20.country      =    .0706585 (mean)
                    22.country      =    .0315574 (mean)
                    23.country      =    .0338834 (mean)
                    24.country      =    .0298287 (mean)
                    25.country      =    .0336948 (mean)
                    26.country      =    .0212793 (mean)
                    27.country      =    .0360207 (mean)
                    28.country      =    .0369637 (mean)
                1.matlin
                    0.female        =    .4987162 (mean)
                    1.female        =    .5012838 (mean)
                    matlin          =           1
                    3.country       =    .0033577 (mean)
                    10.country      =    .3503851 (mean)
                    12.country      =    .3142406 (mean)
                    13.country      =    .1240371 (mean)
                    17.country      =    .0843373 (mean)
                    19.country      =    .0813747 (mean)
                    20.country      =    .0124432 (mean)
                    22.country      =    .0075054 (mean)
                    23.country      =    .0223188 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.1548865   .0112048   -13.82   0.000    -.1768475   -.1
> 329254
      Matrilineal   |  -.0748676   .0280892    -2.67   0.008    -.1299213   -.0
> 198138
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -48546.019
Iteration 1:   log likelihood = -48546.019
```

```
Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,006
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       96.6
                                                              max =      1,750

                                                Wald chi2(28)     =    2317.30
Log likelihood = -48546.019                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
        z_colaction |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |  -.2870186   .0100234   -28.63   0.000    -.3066641   -.
> 2673732
                    |
             matlin |
         Matrilineal |  -.1761814   .0467305    -3.77   0.000    -.2677716   -.
> 0845913
                    |
      female#matlin |
Female#Matrilineal |   .1527098   .0269972     5.66   0.000     .0997963    .
> 2056233
                    |
            country |
           Botswana |  -.5062454   .0796944    -6.35   0.000    -.6624435   -.
> 3500472
       Burkina Faso |   .2085333   .0798221     2.61   0.009     .0520849    .
> 3649818
              Ghana |  -.3206328   .0697066    -4.60   0.000    -.4572551   -.
> 1840104
              Kenya |    .108179   .0711336     1.52   0.128    -.0312403    .
> 2475983
            Lesotho |  -.0260113   .0768321    -0.34   0.735    -.1765996    .
> 1245769
            Liberia |  -.2339345   .0756335    -3.09   0.002    -.3821734   -.
> 0856957
         Madagascar |  -.3178814    .084534    -3.76   0.000    -.4835651   -.
> 1521977
             Malawi |   1.23825   .0757324    16.35   0.000     1.089817    1
> .386683
               Mali |  -.0147895   .0746269    -0.20   0.843    -.1610556    .
```

```
> 1314766
        Mozambique |   .3561097   .0704341     5.06   0.000     .2180615
> .494158
          Namibia |  -.3576335   .0998329    -3.58   0.000    -.5533023   -.
> 1619646
          Nigeria |  -.4338532   .0561769    -7.72   0.000    -.5439579   -.
> 3237485
          Senegal |   .2922828    .089653     3.26   0.001     .1165661    .
> 4679995
     South Africa |   -.298083   .0807827    -3.69   0.000    -.4564142   -.
> 1397517
         Tanzania |   .3101569   .0652168     4.76   0.000     .1823343    .
> 4379796
           Uganda |   .0636764   .0684699     0.93   0.352    -.0705221    .
> 1978748
           Zambia |  -.1430727   .0772935    -1.85   0.064    -.2945651    .
> 0084197
         Zimbabwe |  -.1712331   .0722773    -2.37   0.018    -.3128941   -.
> 0295721
     Sierra Leone |  -.2228141    .081326    -2.74   0.006    -.3822102    -
> .063418
            Niger |  -.1591734   .0824472    -1.93   0.054     -.320767    .
> 0024201
             Togo |   .3168158    .076212     4.16   0.000     .1674429    .
> 4661886
          Burundi |   .3734146   .1331331     2.80   0.005     .1124786    .
> 6343507
         Cameroon |   .2045024   .0736009     2.78   0.005     .0602473    .
> 3487576
                  |   .4310395   .0763876     5.64   0.000     .2813227    .
> 5807564
           Guinea |   .2078532    .071974     2.89   0.004     .0667868    .
> 3489196
                  |
            _cons |   .1287676   .0537216     2.40   0.017     .0234751
>  .23406
------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	**.1649479**	**.0110893**	**.1445843**	**.1881796**
sd(Residual)	**.8936605**	**.0033021**	**.8872119**	**.900156**

LR test vs. linear model: chibar2(01) = **484.48** Prob >= chibar2 = **0.0000**

```
Adjusted predictions                            Number of obs     =     37,006

Expression   : Linear prediction, fixed portion, predict()
over         : matlin female
at           : 0.matlin#0.female
                    female          =           0
                    matlin          =           0
                    1.country       =    .033722 (mean)
                    2.country       =   .0231917 (mean)
                    3.country       =   .0344114 (mean)
                    5.country       =   .0729598 (mean)
                    6.country       =   .0734612 (mean)
                    7.country       =   .0363545 (mean)
                    8.country       =   .0339727 (mean)
                    9.country       =   .0267644 (mean)
                    10.country      =   .0176131 (mean)
                    11.country      =   .0364799 (mean)
                    12.country      =   .0178012 (mean)
                    13.country      =   .0088379 (mean)
                    14.country      =   .0696377 (mean)
                    15.country      =   .0366679 (mean)
                    16.country      =   .0443776 (mean)
                    17.country      =   .0497054 (mean)
                    18.country      =   .0721449 (mean)
                    19.country      =   .0177385 (mean)
                    20.country      =   .0712674 (mean)
                    22.country      =   .0318415 (mean)
                    23.country      =   .0338473 (mean)
                    24.country      =   .0290209 (mean)
                    25.country      =   .0341607 (mean)
                    26.country      =   .0208098 (mean)
                    27.country      =   .0361665 (mean)
                    28.country      =    .037044 (mean)
               0.matlin#1.female
                    female          =           1
                    matlin          =           0
                    1.country       =   .0335987 (mean)
                    2.country       =   .0240707 (mean)
                    3.country       =    .034727 (mean)
                    5.country       =   .0722748 (mean)
                    6.country       =   .0733404 (mean)
                    7.country       =   .0358553 (mean)
                    8.country       =   .0344763 (mean)
                    9.country       =   .0257632 (mean)
                    10.country      =   .0188052 (mean)
                    11.country      =   .0363568 (mean)
                    12.country      =   .0174889 (mean)
                    13.country      =   .0102802 (mean)
                    14.country      =   .0687645 (mean)
```

```
      15.country      =    .0361687 (mean)
      16.country      =    .0453833 (mean)
      17.country      =    .0471385 (mean)
      18.country      =    .0721494 (mean)
      19.country      =    .0191813 (mean)
      20.country      =    .0714599 (mean)
      22.country      =     .031154 (mean)
      23.country      =    .0336614 (mean)
      24.country      =    .0303391 (mean)
      25.country      =    .0329719 (mean)
      26.country      =    .0216887 (mean)
      27.country      =    .0359807 (mean)
      28.country      =     .036921 (mean)
1.matlin#0.female
      female          =           0
      matlin          =           1
      3.country       =    .0035419 (mean)
      10.country      =    .3569461 (mean)
      12.country      =    .3148367 (mean)
      13.country      =    .1239669 (mean)
      17.country      =    .0787092 (mean)
      19.country      =     .081464 (mean)
      20.country      =    .0125935 (mean)
      22.country      =    .0062967 (mean)
      23.country      =     .021645 (mean)
1.matlin#1.female
      female          =           1
      matlin          =           1
      3.country       =    .0031274 (mean)
      10.country      =     .342455 (mean)
      12.country      =    .3178264 (mean)
      13.country      =    .1223612 (mean)
      17.country      =    .0891321 (mean)
      19.country      =    .0817045 (mean)
      20.country      =    .0121188 (mean)
      22.country      =    .0086005 (mean)
      23.country      =     .022674 (mean)
```

```
------------------------------------------------------------------------------
> -------
                    |            Delta-method
                    |     Margin   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
      matlin#female |
 Patrilineal/Mixed #|
              Male  |   .1253624   .0140807     8.90   0.000     .0977648    .
> 1529599
 Patrilineal/Mixed #|
            Female  |  -.1616361   .0140605   -11.50   0.000    -.1891941   -.
> 1340781
  Matrilineal#Male  |    .468847   .0395007    11.87   0.000     .3914271    .
> 5462669
Matrilineal#Female  |   .3207497   .0390455     8.21   0.000      .244222    .
> 3972774
------------------------------------------------------------------------------
> -------

  Variables that uniquely identify margins: matlin female

Conditional marginal effects                    Number of obs     =     37,006

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                   0.female        =    .5000157 (mean)
                   1.female        =    .4999843 (mean)
                   matlin          =           0
                   1.country       =    .0336603 (mean)
                   2.country       =    .0236312 (mean)
                   3.country       =    .0345692 (mean)
                   5.country       =    .0726173 (mean)
                   6.country       =    .0734008 (mean)
                   7.country       =    .0361049 (mean)
                   8.country       =    .0342245 (mean)
                   9.country       =    .0262638 (mean)
                   10.country      =    .0182092 (mean)
                   11.country      =    .0364183 (mean)
                   12.country      =     .017645 (mean)
                   13.country      =     .009559 (mean)
                   14.country      =    .0692011 (mean)
                   15.country      =    .0364183 (mean)
                   16.country      =    .0448804 (mean)
                   17.country      =     .048422 (mean)
                   18.country      =    .0721472 (mean)
```

```
                    19.country      =    .0184599 (mean)
                    20.country      =    .0713637 (mean)
                    22.country      =    .0314978 (mean)
                    23.country      =    .0337543 (mean)
                    24.country      =      .02968 (mean)
                    25.country      =    .0335663 (mean)
                    26.country      =    .0212493 (mean)
                    27.country      =    .0360736 (mean)
                    28.country      =    .0369825 (mean)
                1.matlin
                    0.female        =     .498333 (mean)
                    1.female        =     .501667 (mean)
                    matlin          =           1
                    3.country       =     .003334 (mean)
                    10.country      =    .3496764 (mean)
                    12.country      =    .3163365 (mean)
                    13.country      =    .1231614 (mean)
                    17.country      =     .083938 (mean)
                    19.country      =    .0815846 (mean)
                    20.country      =    .0123554 (mean)
                    22.country      =    .0074524 (mean)
                    23.country      =    .0221612 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2870186   .0100234   -28.63   0.000    -.3066641   -.2
> 673732
      Matrilineal   |  -.1343088   .0250671    -5.36   0.000    -.1834395   -.0
> 851782
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin
```

```
28 .
29 . * Figure A.1
30 . grc1leg engindexA_pp polindexA_pp civindexA_pp, graphregion(fcolor(white) il
   > color(white) lcolor(white)) xcommon ycommon  cols(1) name(graph, replace) //
   > /
   >         l1title("Predicted Values", size(msmall))
   (note:  named style msmall not found in class gsize, default attributes
       used)

31 . graph display graph, xsize(5) ysize(10)

32 . *graph export "Figures/dv_matlin_pp.pdf", replace
33 .
34 . ******************************
35 . * Robustness to using country random effects
36 .
37 . set more off

38 . foreach d in  dv     {
     2.
39 . foreach y in $`d' {
     3. local vtext : variable label `y'
     4. xtmixed `y' i.female##i.matlin   || country: || egroup:
     5. estimates store `y'_re
     6. local c : di %4.3f _b[1.female#1.matlin]
     7. matrix table=r(table)
     8. local p= table[4,8]
     9. local p: di %4.3f `p'
    10.
40 . margins, dydx(female) by(matlin) atmeans vsquish
    11. marginsplot,  ///
   >         title (`""`vtext'"', color(black) size(medium)) ytitle("") xtitle("")
   >  ///estt
   >         plotopts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bla
   > ck) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))  ///
   >         xscale(range(-0.5 1.5)) xlabel(0 1, labs(small)) xsize(1) ysize(1.5)
   >  ///
   >         legend(off) yscale(range(0)) ///
   >         note("Diff-in-Diff: `c', p=`p'", ring(0) position(2)) ///
   >         name(`y', replace) nodraw
    12. }
    13.
```

```
41 . *Figure A.3
42 . graph combine $`d', graphregion(fcolor(white) ilcolor(white) lcolor(white))
   > xcommon ycommon cols(1) name(graph, replace) ///
   >         l1title("Marginal Effect of Female", size(medium))
    14. graph display graph, xsize(5) ysize(10)
    15. *graph export "Figures/`d'_matlin_re.pdf", replace
43 . }

   Performing EM optimization:

   Performing gradient-based optimization:

   Iteration 0:   log likelihood =  -38121.79
   Iteration 1:   log likelihood =  -38121.79

   Computing standard errors:

   Mixed-effects ML regression                     Number of obs     =     37,198

   ------------------------------------------------------------------------------
                   |     No. of       Observations per Group
    Group Variable |     Groups    Minimum    Average    Maximum
   ----------------+-------------------------------------------------------------
           country |         26        689    1,430.7      2,364
             egroup |        415          1       89.6      1,296
   ------------------------------------------------------------------------------

                                                   Wald chi2(3)      =    1125.74
   Log likelihood =  -38121.79                     Prob > chi2       =     0.0000

   ------------------------------------------------------------------------------
   > -------
              engindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
   > terval]
   ----------------------+-------------------------------------------------------
   > -------
                 female |
                 Female |  -.2432859   .0074991   -32.44   0.000    -.2579838   -.
   > 2285879
                        |
                 matlin |
           Matrilineal |  -.0366155    .031229    -1.17   0.241    -.0978233    .
   > 0245922
                        |
          female#matlin |
   Female#Matrilineal |   .0827496    .020204     4.10   0.000     .0431505    .
   > 1223486
                        |
                  _cons |   .0899908   .0275189     3.27   0.001     .0360547
```

```
> .143927
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
country: Identity				
sd(_cons)	**.1311626**	**.0203952**	**.0967056**	**.1778969**
egroup: Identity				
sd(_cons)	**.1090297**	**.0075154**	**.0952514**	**.1248009**
sd(Residual)	**.6704515**	**.0024698**	**.6656282**	**.6753098**

LR test vs. linear model: chi2(**2**) = **1356.61** Prob > chi2 = **0.0000**

Note: LR test is conservative and provided only for reference.

Conditional marginal effects Number of obs = **37,198**

```
Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4995479 (mean)
                    1.female        =    .5004521 (mean)
                    matlin          =           0
               1.matlin
                    0.female        =    .4971707 (mean)
                    1.female        =    .5028293 (mean)
                    matlin          =           1
```

	Delta-method dy/dx	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1.female						
matlin						
Patrilineal/Mixed	**-.2432859**	**.0074991**	**-32.44**	**0.000**	**-.2579838**	**-.2285879**
Matrilineal	**-.1605363**	**.0187604**	**-8.56**	**0.000**	**-.197306**	**-.1237666**

Note: dy/dx for factor levels is the discrete change from the base level.

```
  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -35983.142
Iteration 1:   log likelihood = -35983.142

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,198
```

Group Variable	No. of Groups	Observations per Group Minimum	Average	Maximum
country	**26**	**689**	**1,430.7**	**2,364**
egroup	**415**	**1**	**89.6**	**1,296**

```
                                                Wald chi2(3)      =    1266.06
Log likelihood = -35983.142                     Prob > chi2       =    0.0000
```

polindexA	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
female						
Female	-.2408418	.0070762	-34.04	0.000	-.2547109	-.2269728
matlin						
Matrilineal	-.0828277	.0314608	-2.63	0.008	-.1444898	-.0211657
female#matlin						
Female#Matrilineal	.0600992	.0190639	3.15	0.002	.0227347	.0974637
_cons	.1422418	.0313811	4.53	0.000	.080736	.2037476

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
country: Identity				
sd(_cons)	**.1519076**	**.0228**	**.1131935**	**.2038627**
egroup: Identity				
sd(_cons)	**.1146053**	**.0074835**	**.1008378**	**.1302525**
sd(Residual)	**.6325533**	**.0023307**	**.6280016**	**.637138**

LR test vs. linear model: chi2(**2**) = **2213.78** Prob > chi2 = **0.0000**

Note: LR test is conservative and provided only for reference.

Conditional marginal effects Number of obs = **37,198**

Expression : **Linear prediction, fixed portion, predict()**
dy/dx w.r.t. : **1.female**
over : **matlin**
at : 0.matlin
0.female = **.4995479** (mean)
1.female = **.5004521** (mean)
matlin = **0**
1.matlin
0.female = **.4971707** (mean)
1.female = **.5028293** (mean)
matlin = **1**

	Delta-method dy/dx	Std. Err.	z	P>|z|	[95% Conf.	Int erval]
1.female						
matlin						
Patrilineal/Mixed	**-.2408418**	**.0070762**	**-34.04**	**0.000**	**-.2547109**	**-.2 > 269728**
Matrilineal	**-.1807426**	**.0177017**	**-10.21**	**0.000**	**-.2154374**	**-.1 > 460479**

Note: dy/dx for factor levels is the discrete change from the base level.

Variables that uniquely identify margins: matlin

```
Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -38474.429
Iteration 1:   log likelihood = -38474.428

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     37,198
```

Group Variable	No. of Groups	Observations per Group Minimum	Average	Maximum
country	**26**	**689**	**1,430.7**	**2,364**
egroup	**415**	**1**	**89.6**	**1,296**

```
                                                Wald chi2(3)      =     878.72
Log likelihood = -38474.428                     Prob > chi2       =     0.0000
```

civindexA	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
female Female	**-.2184528**	**.007566**	**-28.87**	**0.000**	**-.233282 -.2036236**
matlin Matrilineal	**-.1705786**	**.0329307**	**-5.18**	**0.000**	**-.2351215 -.1060357**
female#matlin Female#Matrilineal	**.1123761**	**.0203839**	**5.51**	**0.000**	**.0724243 .1523279**
_cons	**.1276028**	**.0471953**	**2.70**	**0.007**	**.0351017 .220104**

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
country: Identity				
sd(_cons)	**.2348665**	**.0338939**	**.177004**	**.3116441**
egroup: Identity				
sd(_cons)	**.1164982**	**.0079469**	**.1019189**	**.1331629**
sd(Residual)	**.6763853**	**.0024923**	**.6715181**	**.6812878**

LR test vs. linear model: chi2(**2**) = **4520.16** Prob > chi2 = **0.0000**

Note: LR test is conservative and provided only for reference.

Conditional marginal effects Number of obs = **37,198**

Expression : **Linear prediction, fixed portion, predict()**
dy/dx w.r.t. : **1.female**
over : **matlin**
at : 0.matlin
0.female = **.4995479** (mean)
1.female = **.5004521** (mean)
matlin = **0**
1.matlin
0.female = **.4971707** (mean)
1.female = **.5028293** (mean)
matlin = **1**

> ———	Delta-method dy/dx	Std. Err.	z	P>|z|	[95% Conf.	Int > erval]
> ———						
1.female						
matlin						
Patrilineal/Mixed	**-.2184528**	**.007566**	**-28.87**	**0.000**	**-.233282**	**-.2 > 036236**
Matrilineal	**-.1060767**	**.0189275**	**-5.60**	**0.000**	**-.1431739**	**-.0 > 689795**

> ———

Note: dy/dx for factor levels is the discrete change from the base level.

Variables that uniquely identify margins: matlin

```
44 .
45 .
46 . ******************************
47 . * Robustness to individual-level controls (age, wealth, urban, formal sector
   >  occupation)
48 .
49 . global con age wealth edu urban employed

50 .
51 . set more off

52 . foreach d in  dv    {
     2.
53 . foreach y in $`d' {
     3. local vtext : variable label `y'
     4. xtmixed `y' i.female##i.matlin i.female##c.age i.female##c.wealth i.femal
   > e##c.edu i.female##i.urban i.female##i.employed i.country || egroup:
     5. estimates store `y'_con
     6. local c : di %4.3f _b[1.female#1.matlin]
     7. matrix table=r(table)
     8. local p= table[4,8]
     9. local p: di %4.3f `p'
    10.
54 . * marginal effects
55 . margins, dydx(female) by(matlin) atmeans vsquish
    11. marginsplot,  ///
   >         title (`"`vtext'"', color(black) size(medium)) ytitle("") xtitle("")
   >  ///estt
   >         plotopts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bla
   > ck) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))  ///
   >         xscale(range(-0.5 1.5)) xlabel(0 1, labs(small)) xsize(1) ysize(1.5)
   >  ///
   >         legend(off)   ///
   >         note("Diff-in-Diff: `c', p=`p'", ring(0) position(2)) ///
   >         name(`y', replace) nodraw
    12. }
    13. *Figure A.2
```

```
56 . graph combine $`d', graphregion(fcolor(white) ilcolor(white) lcolor(white))
   > xcommon ycommon ///
   >         l1title("Marginal Effect of Female", size(medium)) ///
   >         cols(1) name(graph, replace)
    14. graph display graph, xsize(5) ysize(10)
    15. *graph export "Figures/`d'_matlin_controls.pdf", replace
57 . }

   Performing EM optimization:

   Performing gradient-based optimization:

   Iteration 0:   log likelihood = -36625.421
   Iteration 1:   log likelihood = -36625.421

   Computing standard errors:

   Mixed-effects ML regression                     Number of obs     =     36,230
   Group variable: egroup                          Number of groups  =        383

                                                   Obs per group:
                                                                 min =          1
                                                                 avg =       94.6
                                                                 max =      1,731

                                                   Wald chi2(38)     =    2555.70
   Log likelihood = -36625.421                     Prob > chi2       =     0.0000

   ------------------------------------------------------------------------------
   > -------
             engindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
   > terval]
   ------------------------------------------------------------------------------
   > -------
                female |
                Female |  -.1201086   .0260185    -4.62   0.000     -.171104   -.
   > 0691133
                       |
                matlin |
           Matrilineal |  -.0290569   .0305215    -0.95   0.341    -.0888778    .
   > 0307641
                       |
         female#matlin |
   Female#Matrilineal |   .0794223    .020503     3.87   0.000     .0392372    .
   > 1196074
                       |
                   age |   .0025956    .000345     7.52   0.000     .0019194    .
   > 0032719
                       |
```

```
       female#c.age |
            Female  |  -.0008814   .0005172    -1.70   0.088     -.001895    .
> 0001323
                    |
             wealth |  -.0103895   .0033718    -3.08   0.002    -.0169981   -.
> 0037809
                    |
    female#c.wealth |
            Female  |   .0022731   .0045991     0.49   0.621    -.0067409    .
> 0112872
                    |
                edu |   .0692552   .0028643    24.18   0.000     .0636414    .
> 0748691
                    |
       female#c.edu |
            Female  |  -.0159467   .0039576    -4.03   0.000    -.0237035   -.
> 0081899
                    |
            1.urban |  -.0408767    .011354    -3.60   0.000    -.0631301   -.
> 0186233
                    |
       female#urban |
          Female#1  |   .0021467   .0155711     0.14   0.890    -.0283721    .
> 0326654
                    |
         1.employed |    .042964   .0108453     3.96   0.000     .0217075    .
> 0642204
                    |
    female#employed |
          Female#1  |   .0125705   .0158484     0.79   0.428    -.0184918    .
> 0436329
                    |
            country |
          Botswana  |  -.0180383   .0531676    -0.34   0.734    -.1222448    .
> 0861682
       Burkina Faso |  -.0223174   .0532204    -0.42   0.675    -.1266275    .
> 0819928
             Ghana  |  -.0463977   .0471056    -0.98   0.325     -.138723    .
> 0459276
             Kenya  |  -.0717286   .0471052    -1.52   0.128    -.1640532    .
> 0205959
           Lesotho  |   .2655534   .0509663     5.21   0.000     .1656612    .
> 3654455
           Liberia  |  -.0828925   .0505885    -1.64   0.101    -.1820441
> .016259
         Madagascar |  -.3631273   .0556569    -6.52   0.000    -.4722129   -.
> 2540417
            Malawi  |   .1197526   .0511332     2.34   0.019     .0195333    .
> 2199719
```

```
              Mali |   .0485799   .0500845     0.97   0.332    -.0495838    .
> 1467437
        Mozambique |    .033057   .0479245     0.69   0.490    -.0608734    .
> 1269874
           Namibia |  -.0132631   .0648879    -0.20   0.838    -.1404411    .
> 1139148
           Nigeria |   .0860781   .0397427     2.17   0.030     .0081839    .
> 1639723
           Senegal |   .2725616   .0580615     4.69   0.000     .1587632
>  .38636
      South Africa |   .0077134   .0530569     0.15   0.884    -.0962763
> .111703
          Tanzania |   .1205195   .0438627     2.75   0.006     .0345501    .
> 2064888
            Uganda |  -.0326338   .0456245    -0.72   0.474    -.1220561    .
> 0567886
            Zambia |   .0052652   .0521802     0.10   0.920    -.0970062    .
> 1075365
          Zimbabwe |   .0947358   .0485476     1.95   0.051    -.0004157    .
> 1898873
      Sierra Leone |   .0662477   .0543987     1.22   0.223    -.0403718    .
> 1728673
             Niger |   .2810434   .0555484     5.06   0.000     .1721706    .
> 3899163
              Togo |  -.1076138   .0518469    -2.08   0.038    -.2092319   -.
> 0059958
           Burundi |  -.1318728   .0813967    -1.62   0.105    -.2914073    .
> 0276618
          Cameroon |   .0397094   .0503733     0.79   0.431    -.0590204    .
> 1384393
                   |  -.1622933    .051672    -3.14   0.002    -.2635684   -.
> 0610181
            Guinea |   .0484102   .0493826     0.98   0.327     -.048378    .
> 1451983
                   |
             _cons |  -.2493478   .0404813    -6.16   0.000    -.3286897   -
> .170006
-------------------+----------------------------------------------------------
> ------
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.0960181**	**.0069412**	**.0833335**	**.1106335**
sd(Residual)	**.6622247**	**.0024707**	**.6573999**	**.6670849**

LR test vs. linear model: chibar2(01) = **387.10** Prob >= chibar2 = **0.0000**

Conditional marginal effects Number of obs = **36,230**

Expression : **Linear prediction, fixed portion, predict()**
dy/dx w.r.t. : **1.female**
over : **matlin**
at : 0.matlin

0.female	=	**.4997767**	(mean)
1.female	=	**.5002233**	(mean)
matlin	=	**0**	
age	=	**36.93731**	(mean)
wealth	=	**.0592135**	(mean)
edu	=	**3.121993**	(mean)
0.urban	=	**.629873**	(mean)
1.urban	=	**.370127**	(mean)
0.employed	=	**.6923371**	(mean)
1.employed	=	**.3076629**	(mean)
1.country	=	**.033848**	(mean)
2.country	=	**.0236075**	(mean)
3.country	=	**.0349327**	(mean)
5.country	=	**.0732151**	(mean)
6.country	=	**.0737574**	(mean)
7.country	=	**.0362407**	(mean)
8.country	=	**.0320934**	(mean)
9.country	=	**.0264787**	(mean)
10.country	=	**.0180565**	(mean)
11.country	=	**.0370063**	(mean)
12.country	=	**.0158553**	(mean)
13.country	=	**.0096344**	(mean)
14.country	=	**.0682065**	(mean)
15.country	=	**.0368468**	(mean)
16.country	=	**.0443119**	(mean)
17.country	=	**.0491291**	(mean)
18.country	=	**.0730237**	(mean)
19.country	=	**.018567**	(mean)
20.country	=	**.0719071**	(mean)
22.country	=	**.0311363**	(mean)
23.country	=	**.0341351**	(mean)
24.country	=	**.0300836**	(mean)
25.country	=	**.0341032**	(mean)

```
                    26.country      =    .0213105 (mean)
                    27.country      =    .0356664 (mean)
                    28.country      =    .0368468 (mean)
                1.matlin
                    0.female        =    .5053235 (mean)
                    1.female        =    .4946765 (mean)
                    matlin          =           1
                    age             =    35.22973 (mean)
                    wealth          =   -.0685679 (mean)
                    edu             =    2.972563 (mean)
                    0.urban         =    .7215397 (mean)
                    1.urban         =    .2784603 (mean)
                    0.employed      =    .6617527 (mean)
                    1.employed      =    .3382473 (mean)
                    3.country       =    .0028665 (mean)
                    10.country      =    .3517609 (mean)
                    12.country      =    .3036446 (mean)
                    13.country      =    .1263309 (mean)
                    17.country      =    .0876331 (mean)
                    19.country      =    .0843571 (mean)
                    20.country      =    .0128993 (mean)
                    22.country      =    .0077805 (mean)
                    23.country      =    .0227273 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.1976526     .00769   -25.70   0.000    -.2127248   -.1
> 825805
      Matrilineal   |  -.1144451   .0190513    -6.01   0.000    -.1517851   -.0
> 771052
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:
```

```
Iteration 0:   log likelihood = -34676.793
Iteration 1:   log likelihood = -34676.793

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,230
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       94.6
                                                              max =      1,731

                                                Wald chi2(38)     =    2500.33
Log likelihood = -34676.793                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          polindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
            Female  |  -.2037554   .0246442    -8.27   0.000    -.2520572   -.
> 1554537
                    |
             matlin |
       Matrilineal  |  -.0879274   .0311647    -2.82   0.005     -.149009   -.
> 0268458
                    |
      female#matlin |
Female#Matrilineal  |    .060446   .0194183     3.11   0.002     .0223869    .
> 0985051
                    |
                age |   .0034496   .0003269    10.55   0.000     .0028089    .
> 0040902
                    |
       female#c.age |
            Female  |   .0000926   .0004899     0.19   0.850    -.0008676    .
> 0010527
                    |
             wealth |   .0273767   .0031953     8.57   0.000      .021114    .
> 0336393
                    |
    female#c.wealth |
            Female  |  -.0080805   .0043561    -1.85   0.064    -.0166183    .
> 0004572
                    |
                edu |   .0409878   .0027144    15.10   0.000     .0356677    .
```

```
> 0463079
                    |
       female#c.edu |
            Female  |  -.0098717   .0037488    -2.63   0.008    -.0172191   -.
> 0025243
                    |
            1.urban |   -.123039   .0107617   -11.43   0.000    -.1441315   -.
> 1019466
                    |
       female#urban |
          Female#1  |   .0608687   .0147482     4.13   0.000     .0319628    .
> 0897747
                    |
         1.employed |   .0604272   .0102772     5.88   0.000     .0402843    .
> 0805701
                    |
    female#employed |
          Female#1  |   .0251731    .015012     1.68   0.094      -.00425    .
> 0545961
                    |
            country |
           Botswana |  -.2672611   .0537248    -4.97   0.000    -.3725597   -.
> 1619625
       Burkina Faso |  -.2220509   .0536713    -4.14   0.000    -.3272446   -.
> 1168571
              Ghana |  -.3611775   .0472368    -7.65   0.000     -.45376    -
> .268595
              Kenya |  -.2224216   .0477422    -4.66   0.000    -.3159945   -.
> 1288486
            Lesotho |  -.2521993   .0516261    -4.89   0.000    -.3533846    -
> .151014
            Liberia |  -.0104449   .0511378    -0.20   0.838    -.1106731    .
> 0897833
         Madagascar |  -.6338471   .0564846   -11.22   0.000    -.7445549   -.
> 5231393
             Malawi |   .0090284   .0513373     0.18   0.860     -.091591    .
> 1096477
               Mali |  -.2537335   .0503112    -5.04   0.000    -.3523417   -.
> 1551253
         Mozambique |  -.1784018   .0480203    -3.72   0.000    -.2725199   -.
> 0842837
            Namibia |  -.4115628   .0665364    -6.19   0.000    -.5419717    -
> .281154
            Nigeria |  -.4475189   .0389808   -11.48   0.000    -.5239199   -.
> 3711178
            Senegal |   .0091811   .0595049     0.15   0.877    -.1074463    .
> 1258085
       South Africa |  -.4458506   .0540756    -8.24   0.000    -.5518369   -.
> 3398644
```

```
          Tanzania |  -.0719537   .0440468    -1.63   0.102     -.158284    .
> 0143765
            Uganda |   -.025361   .0460926    -0.55   0.582    -.1157009    .
> 0649789
            Zambia |  -.3459594   .0523629    -6.61   0.000    -.4485888
> -.24333
          Zimbabwe |  -.2847428   .0489224    -5.82   0.000     -.380629   -.
> 1888567
      Sierra Leone |  -.0229688   .0550108    -0.42   0.676    -.1307879    .
> 0848504
             Niger |  -.1292061   .0557268    -2.32   0.020    -.2384286   -.
> 0199836
              Togo |  -.2767493   .0517321    -5.35   0.000    -.3781424   -.
> 1753563
           Burundi |  -.3171813   .0861496    -3.68   0.000    -.4860315   -.
> 1483311
          Cameroon |  -.3202359   .0501229    -6.39   0.000    -.4184749   -.
> 2219969
                   |  -.3902622    .051794    -7.53   0.000    -.4917765   -.
> 2887479
            Guinea |  -.2243552   .0490423    -4.57   0.000    -.3204763   -.
> 1282342
                   |
             _cons |   .1319395    .039952     3.30   0.001     .0536351    .
> 2102439
------------------------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.1046743**	**.0072216**	**.0914355**	**.1198299**
sd(Residual)	**.6271048**	**.0023409**	**.6225334**	**.6317097**

LR test vs. linear model: chibar2(01) = **495.09** Prob >= chibar2 = **0.0000**

Conditional marginal effects Number of obs = **36,230**

```
Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4997767 (mean)
                    1.female        =    .5002233 (mean)
                    matlin          =           0
                    age             =    36.93731 (mean)
                    wealth          =    .0592135 (mean)
                    edu             =    3.121993 (mean)
                    0.urban         =     .629873 (mean)
                    1.urban         =     .370127 (mean)
                    0.employed      =    .6923371 (mean)
                    1.employed      =    .3076629 (mean)
                    1.country       =     .033848 (mean)
                    2.country       =    .0236075 (mean)
                    3.country       =    .0349327 (mean)
                    5.country       =    .0732151 (mean)
                    6.country       =    .0737574 (mean)
                    7.country       =    .0362407 (mean)
                    8.country       =    .0320934 (mean)
                    9.country       =    .0264787 (mean)
                    10.country      =    .0180565 (mean)
                    11.country      =    .0370063 (mean)
                    12.country      =    .0158553 (mean)
                    13.country      =    .0096344 (mean)
                    14.country      =    .0682065 (mean)
                    15.country      =    .0368468 (mean)
                    16.country      =    .0443119 (mean)
                    17.country      =    .0491291 (mean)
                    18.country      =    .0730237 (mean)
                    19.country      =     .018567 (mean)
                    20.country      =    .0719071 (mean)
                    22.country      =    .0311363 (mean)
                    23.country      =    .0341351 (mean)
                    24.country      =    .0300836 (mean)
                    25.country      =    .0341032 (mean)
                    26.country      =    .0213105 (mean)
                    27.country      =    .0356664 (mean)
                    28.country      =    .0368468 (mean)
               1.matlin
                    0.female        =    .5053235 (mean)
                    1.female        =    .4946765 (mean)
                    matlin          =           1
                    age             =    35.22973 (mean)
                    wealth          =   -.0685679 (mean)
                    edu             =    2.972563 (mean)
                    0.urban         =    .7215397 (mean)
                    1.urban         =    .2784603 (mean)
```

```
                    0.employed      =    .6617527 (mean)
                    1.employed      =    .3382473 (mean)
                    3.country       =    .0028665 (mean)
                    10.country      =    .3517609 (mean)
                    12.country      =    .3036446 (mean)
                    13.country      =    .1263309 (mean)
                    17.country      =    .0876331 (mean)
                    19.country      =    .0843571 (mean)
                    20.country      =    .0128993 (mean)
                    22.country      =    .0077805 (mean)
                    23.country      =    .0227273 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2013606   .0072838   -27.65   0.000    -.2156366   -.1
> 870847
      Matrilineal   |  -.1433747   .0180436    -7.95   0.000    -.1787395   -.1
> 080099
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -36467.983
Iteration 1:   log likelihood = -36467.983

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     36,230
Group variable: egroup                          Number of groups  =        383

                                                Obs per group:
                                                              min =          1
                                                              avg =       94.6
                                                              max =      1,731
```

Wald chi2(38) = **4205.95**
Log likelihood = **-36467.983** Prob > chi2 = **0.0000**

civindexA	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
female					
Female	**-.1548936**	**.0258932**	**-5.98**	**0.000**	**-.2056433** **-.1041439**
matlin					
Matrilineal	**-.1840681**	**.0327505**	**-5.62**	**0.000**	**-.2482579** **-.1198783**
female#matlin					
Female#Matrilineal	**.1101957**	**.0204024**	**5.40**	**0.000**	**.0702078** **.1501837**
age	**.009042**	**.0003434**	**26.33**	**0.000**	**.0083689** **.0097151**
female#c.age					
Female	**-.0013153**	**.0005147**	**-2.56**	**0.011**	**-.0023241** **-.0003065**
wealth	**.0262878**	**.0033572**	**7.83**	**0.000**	**.0197077** **.0328679**
female#c.wealth					
Female	**.0042145**	**.0045768**	**0.92**	**0.357**	**-.0047559** **.013185**
edu	**.0374819**	**.002852**	**13.14**	**0.000**	**.0318922** **.0430717**
female#c.edu					
Female	**.0042004**	**.0039387**	**1.07**	**0.286**	**-.0035194** **.0119202**
1.urban	**-.2220768**	**.0113071**	**-19.64**	**0.000**	**-.2442383** **-.1999153**
female#urban					
Female#1	**.0575868**	**.0154956**	**3.72**	**0.000**	**.0272159** **.0879577**

```
          1.employed |   .0610875    .010798     5.66   0.000     .0399237    .
> 0822513
                     |
    female#employed |
          Female#1   |   .0220117   .0157729     1.40   0.163    -.0089025    .
> 0529259
                     |
           country   |
          Botswana   |  -.3455198   .0564569    -6.12   0.000    -.4561734   -.
> 2348662
       Burkina Faso  |   .0846388   .0564004     1.50   0.133    -.0259038    .
> 1951815
             Ghana   |  -.2067819   .0496379    -4.17   0.000    -.3040704   -.
> 1094934
             Kenya   |   .1106681   .0501704     2.21   0.027      .012336    .
> 2090003
           Lesotho   |  -.1281772   .0542518    -2.36   0.018    -.2345088   -.
> 0218455
           Liberia   |    .065207   .0537384     1.21   0.225    -.0401183    .
> 1705323
        Madagascar   |  -.4061464   .0593578    -6.84   0.000    -.5224855   -.
> 2898073
            Malawi   |   .7414432    .053947    13.74   0.000     .6357091    .
> 8471774
              Mali   |    .120496   .0528688     2.28   0.023      .016875    .
> 2241169
        Mozambique   |    .154472   .0504612     3.06   0.002     .0555699    .
> 2533742
           Namibia   |  -.2916394   .0699225    -4.17   0.000     -.428685   -.
> 1545937
           Nigeria   |  -.2837499   .0409599    -6.93   0.000    -.3640299
> -.20347
           Senegal   |   .2897105   .0625331     4.63   0.000     .1671478    .
> 4122732
      South Africa   |  -.2614538   .0568267    -4.60   0.000    -.3728321   -.
> 1500755
          Tanzania   |   .2195381    .046286     4.74   0.000     .1288191    .
> 3102571
            Uganda   |   .0036532   .0484366     0.08   0.940    -.0912808    .
> 0985871
            Zambia   |  -.0432612   .0550247    -0.79   0.432    -.1511076    .
> 0645852
          Zimbabwe   |  -.1734094   .0514097    -3.37   0.001    -.2741707   -.
> 0726482
      Sierra Leone   |   .0267085   .0578084     0.46   0.644    -.0865939    .
> 1400108
             Niger   |  -.2104734   .0585593    -3.59   0.000    -.3252475   -.
> 0956992
              Togo   |   .1726525    .054361     3.18   0.001     .066107
```

```
> .279198
           Burundi |   .1627058   .0905413     1.80   0.072    -.0147519    .
> 3401635
          Cameroon |   .1026817   .0526697     1.95   0.051    -.0005491    .
> 2059125
                   |   .2802145   .0544266     5.15   0.000     .1735403    .
> 3868886
            Guinea |   .2877422   .0515338     5.58   0.000     .1867379    .
> 3887466
                   |
             _cons |  -.2967123   .0419811    -7.07   0.000    -.3789937   -.
> 2144309
-------------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.1100178	.0078133	.095722	.1264487
sd(Residual)	.6588864	.0024603	.654082	.6637261

LR test vs. linear model: chibar2(01) = **366.72** Prob >= chibar2 = **0.0000**

Conditional marginal effects Number of obs = **36,230**

```
Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4997767 (mean)
                    1.female        =    .5002233 (mean)
                    matlin          =           0
                    age             =    36.93731 (mean)
                    wealth          =    .0592135 (mean)
                    edu             =    3.121993 (mean)
                    0.urban         =     .629873 (mean)
                    1.urban         =     .370127 (mean)
                    0.employed      =    .6923371 (mean)
                    1.employed      =    .3076629 (mean)
                    1.country       =     .033848 (mean)
                    2.country       =    .0236075 (mean)
                    3.country       =    .0349327 (mean)
                    5.country       =    .0732151 (mean)
                    6.country       =    .0737574 (mean)
                    7.country       =    .0362407 (mean)
                    8.country       =    .0320934 (mean)
                    9.country       =    .0264787 (mean)
```

```
      10.country      =    .0180565 (mean)
      11.country      =    .0370063 (mean)
      12.country      =    .0158553 (mean)
      13.country      =    .0096344 (mean)
      14.country      =    .0682065 (mean)
      15.country      =    .0368468 (mean)
      16.country      =    .0443119 (mean)
      17.country      =    .0491291 (mean)
      18.country      =    .0730237 (mean)
      19.country      =     .018567 (mean)
      20.country      =    .0719071 (mean)
      22.country      =    .0311363 (mean)
      23.country      =    .0341351 (mean)
      24.country      =    .0300836 (mean)
      25.country      =    .0341032 (mean)
      26.country      =    .0213105 (mean)
      27.country      =    .0356664 (mean)
      28.country      =    .0368468 (mean)
1.matlin
      0.female        =    .5053235 (mean)
      1.female        =    .4946765 (mean)
      matlin          =           1
      age             =    35.22973 (mean)
      wealth          =   -.0685679 (mean)
      edu             =    2.972563 (mean)
      0.urban         =    .7215397 (mean)
      1.urban         =    .2784603 (mean)
      0.employed      =    .6617527 (mean)
      1.employed      =    .3382473 (mean)
      3.country       =    .0028665 (mean)
      10.country      =    .3517609 (mean)
      12.country      =    .3036446 (mean)
      13.country      =    .1263309 (mean)
      17.country      =    .0876331 (mean)
      19.country      =    .0843571 (mean)
      20.country      =    .0128993 (mean)
      22.country      =    .0077805 (mean)
      23.country      =    .0227273 (mean)
```

```
------------------------------------------------------------------------------
> ------
                 |            Delta-method
                 |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
-----------------+------------------------------------------------------------
> ------
1.female         |
           matlin |
Patrilineal/Mixed |  -.1620268   .0076529   -21.17   0.000    -.1770263   -.1
> 470273
     Matrilineal |  -.0553569    .018958    -2.92   0.004     -.092514   -.0
> 181998
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

58 .
59 .
60 .
61 . ******************************
62 . * Robustness to controlling for cattle dependence and the plow
63 .
64 . set more off

65 . foreach d in  dv     {
   2.
66 . foreach y in $`d' {
   3. local vtext : variable label `y'
   4. xtmixed `y' i.female##i.matlin i.female##i.cattle i.female##i.plow  i.cou
> ntry || egroup:
   5. estimates store `y'_cattle
   6. local c : di %4.3f _b[1.female#1.matlin]
   7. matrix table=r(table)
   8. local p= table[4,8]
   9. local p: di %4.3f `p'
  10.
```

```
67 . margins, dydx(female) by(matlin) atmeans vsquish
    11. marginsplot,  ///
   >         title (`""`vtext'"', color(black) size(medium)) ytitle("") xtitle("")
   >  ///estt
   >         plotopts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bla
   > ck) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))  ///
   >         xscale(range(-0.5 1.5)) xlabel(0 1, labs(small)) xsize(1) ysize(1.5)
   >  ///
   >         legend(off) yscale(range(0)) ///
   >         note("Diff-in-Diff: `c', p=`p'", ring(0) position(2)) ///
   >     note("Controlling for Cattle Dependence and Plow Use", ring(0) position(
   > 5)) ///
   >         name(`y', replace) nodraw
    12.
68 . }
    13.
69 . *Figure A.9
70 . graph combine $`d', graphregion(fcolor(white) ilcolor(white) lcolor(white))
   > xcommon ycommon cols(1) name(graph, replace) ///
   >                 l1title("Marginal Effect of Female", size(medium))
    14. graph display graph, xsize(5) ysize(10)
    15. *graph export "Figures/`d'_matlin_cattle.pdf", replace
71 . }

   Performing EM optimization:

   Performing gradient-based optimization:

   Iteration 0:   log likelihood = -35989.114
   Iteration 1:   log likelihood = -35989.114

   Computing standard errors:

   Mixed-effects ML regression                     Number of obs     =     35,054
   Group variable: egroup                          Number of groups  =        369

                                                   Obs per group:
                                                                 min =          1
                                                                 avg =       95.0
                                                                 max =      1,754

                                                   Wald chi2(42)     =    1455.39
   Log likelihood = -35989.114                     Prob > chi2       =     0.0000
```

```
------------------------------------------------------------------------------
> -------
          engindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
             female |
             Female |  -.2573562    .028391    -9.06   0.000    -.3130016   -.
> 2017109
                    |
             matlin |
         Matrilineal |  -.0602648   .0358173    -1.68   0.092    -.1304654    .
> 0099358
                    |
      female#matlin |
Female#Matrilineal |   .0996179   .0249108     4.00   0.000     .0507936    .
> 1484422
                    |
             cattle |
             6-15% |   .0130951   .0586392     0.22   0.823    -.1018356    .
> 1280258
            16-25% |   .0352249   .0594545     0.59   0.554    -.0813039    .
> 1517537
            26-35% |   -.051702   .0619673    -0.83   0.404    -.1731556    .
> 0697517
            36-45% |  -.0386861   .0662613    -0.58   0.559     -.168556    .
> 0911837
            46-55% |   .0627167   .0845831     0.74   0.458    -.1030631    .
> 2284966
              56+% |  -.0025807    .074531    -0.03   0.972    -.1486588    .
> 1434974
                    |
      female#cattle |
      Female#6-15% |  -.0089102   .0317739    -0.28   0.779    -.0711859    .
> 0533654
     Female#16-25% |   -.022798   .0315727    -0.72   0.470    -.0846794    .
> 0390834
     Female#26-35% |   .0349382   .0336216     1.04   0.299    -.0309589    .
> 1008353
     Female#36-45% |   .0682576   .0348654     1.96   0.050    -.0000773    .
> 1365925
    Female# 46-55% |  -.0006711   .0695899    -0.01   0.992    -.1370649    .
> 1357227
       Female#56+% |   .0578278   .0479237     1.21   0.228     -.036101    .
> 1517566
                    |
             1.plow |  -.0322487   .0524826    -0.61   0.539    -.1351127    .
> 0706152
                    |
```

```
        female#plow |
          Female#1  |   .0496442   .0387422     1.28   0.200    -.0262892    .
> 1255776
                    |
            country |
           Botswana |   .1153936    .061614     1.87   0.061    -.0053677    .
> 2361548
       Burkina Faso |  -.0271642   .0547962    -0.50   0.620    -.1345629    .
> 0802344
              Ghana |   .0320976    .048546     0.66   0.508    -.0630509
> .127246
              Kenya |   .0750646   .0498143     1.51   0.132    -.0225696    .
> 1726988
            Lesotho |   .3784637   .0648649     5.83   0.000     .2513308    .
> 5055967
            Liberia |  -.0067984   .0529523    -0.13   0.898     -.110583    .
> 0969862
         Madagascar |  -.3455734   .0613673    -5.63   0.000    -.4658512   -.
> 2252956
             Malawi |   .1800716    .055182     3.26   0.001     .0719168    .
> 2882263
               Mali |    .047959   .0518202     0.93   0.355    -.0536067    .
> 1495247
         Mozambique |   .1015679    .054578     1.86   0.063    -.0054031    .
> 2085389
            Namibia |   .1213361   .0751869     1.61   0.107    -.0260276    .
> 2686997
            Nigeria |   .2329505   .0409174     5.69   0.000      .152754
> .313147
            Senegal |   .3244823   .0601613     5.39   0.000     .2065683    .
> 4423964
       South Africa |   .1798435   .0585896     3.07   0.002     .0650099
> .294677
           Tanzania |   .2262903   .0456973     4.95   0.000     .1367251    .
> 3158554
             Uganda |   .0805234   .0483496     1.67   0.096      -.01424    .
> 1752868
             Zambia |   .1218932   .0555189     2.20   0.028     .0130782    .
> 2307083
           Zimbabwe |   .2478456   .0517341     4.79   0.000     .1464487    .
> 3492425
       Sierra Leone |   .1353368   .0555661     2.44   0.015     .0264292    .
> 2442443
              Niger |   .2411165    .057834     4.17   0.000     .1277639
> .354469
               Togo |  -.0546462   .0531361    -1.03   0.304    -.1587912    .
> 0494987
            Burundi |  -.0489439   .0867002    -0.56   0.572    -.2188732    .
> 1209854
```

```
          Cameroon |    .171721   .0517772     3.32   0.001     .0702396    .
> 2732024
                   |   -.1135736   .0534616    -2.12   0.034    -.2183564   -.
> 0087907
           Guinea |    .070072   .0507531     1.38   0.167    -.0294023    .
> 1695463
                  |
            _cons |   -.0036212   .0683679    -0.05   0.958    -.1376197    .
> 1303774
------------------+------------------------------------------------------------
> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	**.1007395**	**.0075366**	**.087**	**.1166488**
sd(Residual)	**.6726473**	**.0025523**	**.6676635**	**.6776683**

LR test vs. linear model: chibar2(01) = **320.85** Prob >= chibar2 = **0.0000**

Conditional marginal effects Number of obs = **35,054**

Expression : **Linear prediction, fixed portion, predict()**
dy/dx w.r.t. : **1.female**
over : **matlin**
at : 0.matlin

0.female	=	**.4998404**	(mean)
1.female	=	**.5001596**	(mean)
matlin	=	**0**	
0.cattle	=	**.0685154**	(mean)
1.cattle	=	**.243107**	(mean)
2.cattle	=	**.2949643**	(mean)
3.cattle	=	**.2022913**	(mean)
4.cattle	=	**.1413709**	(mean)
5.cattle	=	**.0108821**	(mean)
6.cattle	=	**.038869**	(mean)
0.plow	=	**.9516531**	(mean)
1.plow	=	**.0483469**	(mean)
1.country	=	**.0343056**	(mean)
2.country	=	**.0241894**	(mean)
3.country	=	**.0354863**	(mean)
5.country	=	**.0740682**	(mean)
6.country	=	**.0751213**	(mean)
7.country	=	**.0373053**	(mean)
8.country	=	**.0351991**	(mean)
9.country	=	**.0214769**	(mean)
10.country	=	**.018541**	(mean)

```
                    11.country      =    .0371458 (mean)
                    12.country      =    .0099566 (mean)
                    13.country      =    .0063186 (mean)
                    14.country      =    .0703344 (mean)
                    15.country      =    .0372734 (mean)
                    16.country      =     .045794 (mean)
                    17.country      =    .0493362 (mean)
                    18.country      =    .0718343 (mean)
                    19.country      =    .0187963 (mean)
                    20.country      =      .06976 (mean)
                    22.country      =    .0323909 (mean)
                    23.country      =    .0345609 (mean)
                    24.country      =    .0306357 (mean)
                    25.country      =    .0342099 (mean)
                    26.country      =    .0214769 (mean)
                    27.country      =    .0367947 (mean)
                    28.country      =    .0376883 (mean)
                1.matlin
                    0.female        =    .4908553 (mean)
                    1.female        =    .5091447 (mean)
                    matlin          =           1
                    0.cattle        =     .027972 (mean)
                    1.cattle        =    .7103281 (mean)
                    2.cattle        =    .0599785 (mean)
                    3.cattle        =    .1713287 (mean)
                    5.cattle        =    .0303927 (mean)
                    plow            =           0
                    3.country       =    .0045724 (mean)
                    10.country      =    .3811189 (mean)
                    12.country      =    .1675632 (mean)
                    13.country      =     .169177 (mean)
                    17.country      =    .1078537 (mean)
                    19.country      =    .1121571 (mean)
                    20.country      =    .0169446 (mean)
                    22.country      =    .0102205 (mean)
                    23.country      =    .0303927 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2448891   .0076108   -32.18   0.000    -.2598059   -.2
> 299723
      Matrilineal   |  -.1594694   .0220984    -7.22   0.000    -.2027814   -.1
```

```
> 161574
------------------------------------------------------------------------------
> -------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -33794.216
Iteration 1:   log likelihood = -33794.216

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     35,054
Group variable: egroup                          Number of groups  =        369

                                                Obs per group:
                                                              min =          1
                                                              avg =       95.0
                                                              max =      1,754

                                                Wald chi2(42)     =    1793.95
Log likelihood = -33794.216                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          polindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
------------------------------------------------------------------------------
> -------
             female |
            Female  |  -.2707915   .0266655   -10.16   0.000    -.3230549   -.
> 2185281
                    |
             matlin |
       Matrilineal  |  -.1213886   .0339858    -3.57   0.000    -.1879995   -.
> 0547777
                    |
      female#matlin |
Female#Matrilineal  |   .0814199   .0233971     3.48   0.001     .0355624    .
> 1272774
                    |
             cattle |
             6-15%  |  -.0125163   .0556883    -0.22   0.822    -.1216634    .
> 0966307
            16-25%  |   .0374349   .0564716     0.66   0.507    -.0732473    .
```

```
> 1481171
            26-35% |  -.0094641   .0588425    -0.16   0.872    -.1247933    .
> 1058651
            36-45% |    -.02968   .0629436    -0.47   0.637    -.1530472    .
> 0936871
            46-55% |  -.0663814   .0801667    -0.83   0.408    -.2235053    .
> 0907425
              56+% |  -.0180278   .0707749    -0.25   0.799    -.1567441    .
> 1206885
                   |
      female#cattle |
      Female#6-15% |    .029482   .0298429     0.99   0.323    -.0290091
> .087973
     Female#16-25% |  -.0005093   .0296539    -0.02   0.986    -.0586299    .
> 0576113
     Female#26-35% |   .0310577   .0315783     0.98   0.325    -.0308346
>  .09295
     Female#36-45% |    .062426   .0327464     1.91   0.057    -.0017558    .
> 1266078
    Female# 46-55% |   .0780775   .0653623     1.19   0.232    -.0500303    .
> 2061853
      Female#56+% |   .0115648   .0450114     0.26   0.797    -.0766559    .
> 0997855
                   |
             1.plow |  -.0635168   .0497825    -1.28   0.202    -.1610886
> .034055
                   |
        female#plow |
          Female#1 |   .0604487   .0363891     1.66   0.097    -.0108726    .
> 1317699
                   |
           country |
          Botswana |  -.1952348   .0584307    -3.34   0.001    -.3097569   -.
> 0807127
      Burkina Faso |  -.1966784   .0519096    -3.79   0.000    -.2984193   -.
> 0949374
             Ghana |  -.3354116   .0459461    -7.30   0.000    -.4254642    -
> .245359
             Kenya |  -.1206178   .0472447    -2.55   0.011    -.2132157
> -.02802
           Lesotho |  -.1386931   .0615698    -2.25   0.024    -.2593677   -.
> 0180186
           Liberia |   .0543401   .0501692     1.08   0.279    -.0439897
>  .15267
        Madagascar |  -.5551807   .0581854    -9.54   0.000     -.669222   -.
> 4411394
            Malawi |   .1231567   .0522629     2.36   0.018     .0207232    .
> 2255901
              Mali |  -.2309248   .0490645    -4.71   0.000    -.3270894   -.
```

```
> 1347602
       Mozambique |  -.1396128   .0516665    -2.70   0.007    -.2408773   -.
> 0383484
         Namibia |  -.2983065   .0713852    -4.18   0.000    -.4382189   -.
> 1583941
         Nigeria |  -.3439038   .0386142    -8.91   0.000    -.4195862   -.
> 2682215
         Senegal |   .0401774     .05712     0.70   0.482    -.0717759    .
> 1521306
    South Africa |   -.373269   .0555733    -6.72   0.000    -.4821906   -.
> 2643474
        Tanzania |   .0189551   .0432718     0.44   0.661    -.0658559    .
> 1037662
          Uganda |   .0474558   .0458327     1.04   0.300    -.0423747    .
> 1372864
          Zambia |  -.2721697   .0525509    -5.18   0.000    -.3751674   -.
> 1691719
        Zimbabwe |  -.1978258   .0490417    -4.03   0.000    -.2939456   -.
> 1017059
    Sierra Leone |   .0084147   .0526602     0.16   0.873    -.0947974    .
> 1116268
           Niger |  -.1064009    .054745    -1.94   0.052    -.2136991    .
> 0008973
            Togo |  -.2366582   .0502657    -4.71   0.000    -.3351773   -.
> 1381392
         Burundi |  -.2558294    .082669    -3.09   0.002    -.4178577   -.
> 0938012
        Cameroon |   -.244486   .0489647    -4.99   0.000    -.3404551    -
> .148517
                 |  -.3392115   .0505903    -6.71   0.000    -.4383666   -.
> 2400564
          Guinea |   -.181284    .047977    -3.78   0.000    -.2753172   -.
> 0872508
                 |
           _cons |   .3205541   .0648516     4.94   0.000     .1934473    .
> 4476609
-----------------+------------------------------------------------------------

> ————————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf. Interval]	
egroup: Identity				
sd(_cons)	.0964698	.0070435	.0836071	.1113114
sd(Residual)	.6317611	.0023969	.6270806	.6364764

LR test vs. linear model: chibar2(01) = **384.04** Prob >= chibar2 = **0.0000**

```
Conditional marginal effects                    Number of obs     =     35,054

Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4998404 (mean)
                    1.female        =    .5001596 (mean)
                    matlin          =           0
                    0.cattle        =    .0685154 (mean)
                    1.cattle        =     .243107 (mean)
                    2.cattle        =    .2949643 (mean)
                    3.cattle        =    .2022913 (mean)
                    4.cattle        =    .1413709 (mean)
                    5.cattle        =    .0108821 (mean)
                    6.cattle        =     .038869 (mean)
                    0.plow          =    .9516531 (mean)
                    1.plow          =    .0483469 (mean)
                    1.country       =    .0343056 (mean)
                    2.country       =    .0241894 (mean)
                    3.country       =    .0354863 (mean)
                    5.country       =    .0740682 (mean)
                    6.country       =    .0751213 (mean)
                    7.country       =    .0373053 (mean)
                    8.country       =    .0351991 (mean)
                    9.country       =    .0214769 (mean)
                    10.country      =     .018541 (mean)
                    11.country      =    .0371458 (mean)
                    12.country      =    .0099566 (mean)
                    13.country      =    .0063186 (mean)
                    14.country      =    .0703344 (mean)
                    15.country      =    .0372734 (mean)
                    16.country      =     .045794 (mean)
                    17.country      =    .0493362 (mean)
                    18.country      =    .0718343 (mean)
                    19.country      =    .0187963 (mean)
                    20.country      =      .06976 (mean)
                    22.country      =    .0323909 (mean)
                    23.country      =    .0345609 (mean)
                    24.country      =    .0306357 (mean)
                    25.country      =    .0342099 (mean)
                    26.country      =    .0214769 (mean)
                    27.country      =    .0367947 (mean)
                    28.country      =    .0376883 (mean)
               1.matlin
                    0.female        =    .4908553 (mean)
                    1.female        =    .5091447 (mean)
                    matlin          =           1
                    0.cattle        =     .027972 (mean)
```

```
                    1.cattle        =    .7103281 (mean)
                    2.cattle        =    .0599785 (mean)
                    3.cattle        =    .1713287 (mean)
                    5.cattle        =    .0303927 (mean)
                    plow            =           0
                    3.country       =    .0045724 (mean)
                    10.country      =    .3811189 (mean)
                    12.country      =    .1675632 (mean)
                    13.country      =     .169177 (mean)
                    17.country      =    .1078537 (mean)
                    19.country      =    .1121571 (mean)
                    20.country      =    .0169446 (mean)
                    22.country      =    .0102205 (mean)
                    23.country      =    .0303927 (mean)

------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
------------------------------------------------------------------------------
> ------
1.female            |
            matlin  |
Patrilineal/Mixed   |  -.2444449   .0071483   -34.20   0.000    -.2584553   -.2
> 304344
      Matrilineal   |  -.1607662   .0207555    -7.75   0.000    -.2014462   -.1
> 200862
------------------------------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0:   log likelihood = -36337.131
Iteration 1:   log likelihood =  -36337.13

Computing standard errors:

Mixed-effects ML regression                     Number of obs     =     35,054
Group variable: egroup                          Number of groups  =        369
```

```
                                                Obs per group:
                                                              min =          1
                                                              avg =       95.0
                                                              max =      1,754

                                                Wald chi2(42)     =    2167.20
Log likelihood =  -36337.13                     Prob > chi2       =     0.0000

------------------------------------------------------------------------------
> -------
          civindexA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. In
> terval]
--------------------+---------------------------------------------------------
> -------
             female |
             Female |  -.2441503   .0286792    -8.51   0.000    -.3003605
> -.18794
                    |
             matlin |
       Matrilineal  |  -.1795042   .0354593    -5.06   0.000     -.249003   -.
> 1100053
                    |
      female#matlin |
Female#Matrilineal  |   .1270502   .0251631     5.05   0.000     .0777315    .
> 1763689
                    |
             cattle |
             6-15%  |   .1272577   .0579429     2.20   0.028     .0136916    .
> 2408238
            16-25%  |   .1307852   .0587301     2.23   0.026     .0156763    .
> 2458942
            26-35%  |   .1517816   .0612458     2.48   0.013      .031742    .
> 2718212
            36-45%  |   .1067175   .0654411     1.63   0.103    -.0215446    .
> 2349796
            46-55%  |   .0714947   .0839236     0.85   0.394    -.0929926
> .235982
              56+%  |   .1320126   .0736631     1.79   0.073    -.0123645    .
> 2763897
                    |
      female#cattle |
      Female#6-15%  |  -.0230763   .0320961    -0.72   0.472    -.0859834    .
> 0398308
     Female#16-25%  |   .0064308    .031893     0.20   0.840    -.0560784    .
> 0689399
     Female#26-35%  |   .0514956   .0339626     1.52   0.129    -.0150699    .
> 1180611
     Female#36-45%  |   .1112554   .0352192     3.16   0.002     .0422271    .
> 1802837
```

```
    Female# 46-55% |   .0608603   .0702925     0.87   0.387    -.0769104
> .198631
      Female#56+% |  -.0916979   .0484096    -1.89   0.058     -.186579    .
> 0031831
                  |
            1.plow |  -.0544134   .0519897    -1.05   0.295    -.1563114    .
> 0474846
                  |
        female#plow |
          Female#1 |   .0926123   .0391324     2.37   0.018     .0159143    .
> 1693104
                  |
           country |
          Botswana |  -.3254343    .061058    -5.33   0.000    -.4451057   -.
> 2057629
      Burkina Faso |   .1388286   .0544133     2.55   0.011     .0321805    .
> 2454767
             Ghana |  -.1878454   .0482925    -3.89   0.000    -.2824969   -.
> 0931939
             Kenya |   .1932237    .049353     3.92   0.000     .0964935    .
> 2899539
           Lesotho |  -.0231849   .0641607    -0.36   0.718    -.1489375    .
> 1025678
           Liberia |   .1221395   .0525705     2.32   0.020     .0191032    .
> 2251758
        Madagascar |  -.3271046   .0608363    -5.38   0.000    -.4463416   -.
> 2078677
            Malawi |   .8103728   .0548152    14.78   0.000     .7029371    .
> 9178085
              Mali |   .1790893   .0515073     3.48   0.001     .0781368    .
> 2800417
        Mozambique |   .1956793   .0542724     3.61   0.000     .0893072    .
> 3020513
           Namibia |   -.213534   .0743245    -2.87   0.004    -.3592073   -.
> 0678606
           Nigeria |  -.1738113   .0409354    -4.25   0.000    -.2540432   -.
> 0935794
           Senegal |   .3129154   .0594748     5.26   0.000      .196347    .
> 4294838
      South Africa |  -.2360396   .0580322    -4.07   0.000    -.3497807   -.
> 1222985
          Tanzania |   .3125275   .0454173     6.88   0.000     .2235111    .
> 4015438
            Uganda |   .0776695   .0479495     1.62   0.105    -.0163097    .
> 1716487
            Zambia |   .0427888   .0552197     0.77   0.438    -.0654399    .
> 1510175
          Zimbabwe |  -.0477186   .0512977    -0.93   0.352    -.1482604    .
> 0528231
```

```
      Sierra Leone |   .0799179   .0551332     1.45   0.147    -.0281411    .
> 1879769
             Niger |  -.1515686   .0575049    -2.64   0.008    -.2642761   -.
> 0388611
              Togo |   .2141082   .0529065     4.05   0.000     .1104133    .
> 3178031
           Burundi |   .1930124    .084987     2.27   0.023      .026441    .
> 3595838
          Cameroon |   .1890177   .0515945     3.66   0.000     .0878943    .
> 2901412
                   |    .310807   .0531985     5.84   0.000     .2065398    .
> 4150742
            Guinea |   .3460937    .050606     6.84   0.000     .2469077    .
> 4452797
                   |
             _cons |  -.0708246   .0677112    -1.05   0.296     -.203536    .
> 0618868
-------------------+------------------------------------------------------------

> ———————
```

Random-effects Parameters	Estimate	Std. Err.	[95% Conf.	Interval]
egroup: Identity				
sd(_cons)	.0978705	.0078013	.0837148	.1144198
sd(Residual)	.6794856	.002579	.6744496	.6845592

LR test vs. linear model: chibar2(01) = **280.11** Prob >= chibar2 = **0.0000**

Conditional marginal effects Number of obs = **35,054**

```
Expression   : Linear prediction, fixed portion, predict()
dy/dx w.r.t. : 1.female
over         : matlin
at           : 0.matlin
                    0.female        =    .4998404 (mean)
                    1.female        =    .5001596 (mean)
                    matlin          =           0
                    0.cattle        =    .0685154 (mean)
                    1.cattle        =     .243107 (mean)
                    2.cattle        =    .2949643 (mean)
                    3.cattle        =    .2022913 (mean)
                    4.cattle        =    .1413709 (mean)
                    5.cattle        =    .0108821 (mean)
                    6.cattle        =     .038869 (mean)
                    0.plow          =    .9516531 (mean)
                    1.plow          =    .0483469 (mean)
                    1.country       =    .0343056 (mean)
```

```
      2.country       =    .0241894 (mean)
      3.country       =    .0354863 (mean)
      5.country       =    .0740682 (mean)
      6.country       =    .0751213 (mean)
      7.country       =    .0373053 (mean)
      8.country       =    .0351991 (mean)
      9.country       =    .0214769 (mean)
      10.country      =     .018541 (mean)
      11.country      =    .0371458 (mean)
      12.country      =    .0099566 (mean)
      13.country      =    .0063186 (mean)
      14.country      =    .0703344 (mean)
      15.country      =    .0372734 (mean)
      16.country      =     .045794 (mean)
      17.country      =    .0493362 (mean)
      18.country      =    .0718343 (mean)
      19.country      =    .0187963 (mean)
      20.country      =      .06976 (mean)
      22.country      =    .0323909 (mean)
      23.country      =    .0345609 (mean)
      24.country      =    .0306357 (mean)
      25.country      =    .0342099 (mean)
      26.country      =    .0214769 (mean)
      27.country      =    .0367947 (mean)
      28.country      =    .0376883 (mean)
  1.matlin
      0.female        =    .4908553 (mean)
      1.female        =    .5091447 (mean)
      matlin          =           1
      0.cattle        =     .027972 (mean)
      1.cattle        =    .7103281 (mean)
      2.cattle        =    .0599785 (mean)
      3.cattle        =    .1713287 (mean)
      5.cattle        =    .0303927 (mean)
      plow            =           0
      3.country       =    .0045724 (mean)
      10.country      =    .3811189 (mean)
      12.country      =    .1675632 (mean)
      13.country      =     .169177 (mean)
      17.country      =    .1078537 (mean)
      19.country      =    .1121571 (mean)
      20.country      =    .0169446 (mean)
      22.country      =    .0102205 (mean)
      23.country      =    .0303927 (mean)
```

```
------------------------------------------------------------------------------
> ------
                    |            Delta-method
                    |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Int
> erval]
--------------------+---------------------------------------------------------
> ------
1.female            |
             matlin |
Patrilineal/Mixed   |  -.2201424   .0076878   -28.64   0.000    -.2352102   -.2
> 050747
      Matrilineal   |  -.1224338   .0223222    -5.48   0.000    -.1661845    -.
> 078683
--------------------+---------------------------------------------------------
> ------
Note: dy/dx for factor levels is the discrete change from the base level.

  Variables that uniquely identify margins: matlin

72 .
73 .
74 .
75 .
76 . *********************************
77 . * Cattle Dependence/Plow Use and Matrilineality (Ethnic Group Level)
78 . *********************************
79 .
80 . tab cattle if etag==1, summ(matlin)

  Dependence |    Summary of Matrilineal Descent
   on Cattle |        Mean   Std. Dev.       Freq.
-------------+------------------------------------
        0-5% |          .5   .52704628          10
       6-15% |        .225    .4193332         120
      16-25% |  .01834862   .13482852         109
      26-35% |  .02469136   .15614966          81
      36-45% |           0           0          39
      46-55% |  .08333333   .28867513          12
        56+% |           0           0          12
-------------+------------------------------------
       Total |  .09660574   .29580659         383
```

```
81 . tab cattle if etag==1, summ(plow)
```

Dependence on Cattle	Summary of Plow Use Mean	Std. Dev.	Freq.
0-5%	0	0	10
6-15%	0	0	113
16-25%	.00952381	.09759001	105
26-35%	.24691358	.43390276	81
36-45%	0	0	39
46-55%	.25	.45226702	12
56+%	0	0	11
Total	.06469003	.24631028	371

```
82 . ttest matlin if etag==1, by(plow)
```

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
0	345	.0927536	.0156404	.2905082	.0619907	.1235165
1	24	0	0	0	0	0
combined	369	.0867209	.0146703	.2818077	.0578727	.115569
diff		.0927536	.0593749		-.024004	.2095113

diff = mean(0) - mean(1) t = 1.5622
Ho: diff = 0 degrees of freedom = 367

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
Pr(T < t) = 0.9404 Pr(|T| > |t|) = 0.1191 Pr(T > t) = 0.0596

```
83 .
84 . *Figure A.7
85 . reg matlin i.cattle i.country if etag==1
```

Source	SS	df	MS		
Model	13.8064629	31	.445369771	Number of obs	= 383
Residual	19.6191246	351	.055894942	F(31, 351)	= 7.97
				Prob > F	= 0.0000
Total	33.4255875	382	.087501538	R-squared	= 0.4131
				Adj R-squared	= 0.3612
				Root MSE	= .23642

```
-------------------------------------------------------------------------------
> ──
      matlin |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interva
> l]
-------------+-----------------------------------------------------------------
> ──
      cattle |
      6-15%  |  -.0962901   .0871523    -1.10   0.270    -.2676965    .07511
> 63
      16-25% |  -.3337916    .086627    -3.85   0.000    -.5041648   -.16341
> 84
      26-35% |  -.3585947   .0890784    -4.03   0.000    -.5337892   -.18340
> 01
      36-45% |  -.3642198   .0982498    -3.71   0.000    -.5574522   -.17098
> 75
      46-55% |  -.3493259   .1122132    -3.11   0.002    -.5700208    -.1286
> 31
        56+% |  -.3146468   .1096475    -2.87   0.004    -.5302955   -.09899
> 81
             |
     country |
    Botswana |   .0473649   .1120205     0.42   0.673     -.172951    .26768
> 08
Burkina Faso |   .0102115   .1069176     0.10   0.924    -.2000683    .22049
> 12
       Ghana |  -.0411769   .0992913    -0.41   0.679    -.2364577    .15410
> 38
       Kenya |   .0221429   .0995333     0.22   0.824    -.1736138    .21789
> 96
     Lesotho |   .0462443   .1047718     0.44   0.659    -.1598152    .25230
> 39
     Liberia |  -.2001505   .1082192    -1.85   0.065    -.4129901     .0126
> 89
  Madagascar |   .0362844   .1081336     0.34   0.737    -.1763869    .24895
> 56
      Malawi |   .3064967   .1165623     2.63   0.009     .0772482    .53574
> 51
        Mali |  -.0577546   .1068394    -0.54   0.589    -.2678805    .15237
> 13
  Mozambique |   .3634086   .1011081     3.59   0.000     .1645547    .56226
> 26
     Namibia |   .1956567   .1293597     1.51   0.131     -.058761    .45007
> 43
     Nigeria |  -.1522059   .0949491    -1.60   0.110    -.3389467    .03453
> 49
     Senegal |  -.0262548   .1152863    -0.23   0.820    -.2529935     .2004
> 84
South Africa |   .0403951   .1192503     0.34   0.735    -.1941399    .27493
> 01
```

```
      Tanzania |    .206393   .0924029     2.23   0.026       .02466     .3881
> 26
        Uganda |    .0160854   .0971971     0.17   0.869    -.1750766     .20724
> 74
        Zambia |    .3725891   .1100341     3.39   0.001     .1561801     .58899
> 81
      Zimbabwe |    .1209693   .1040206     1.16   0.246    -.0836127     .32555
> 13
  Sierra Leone |    .0521822   .1126296     0.46   0.643    -.1693316     .27369
> 61
         Niger |    .2345397   .1361103     1.72   0.086    -.0331548     .50223
> 41
          Togo |   -.0389888    .119036    -0.33   0.743    -.2731024     .19512
> 48
       Burundi |    .0451896   .1883997     0.24   0.811    -.3253447     .41572
> 39
      Cameroon |   -.1003594   .0956258    -1.05   0.295    -.2884309     .08771
> 21
               |   -.2171149   .1477014    -1.47   0.142    -.5076059     .07337
> 61
        Guinea |    -.084541   .1158574    -0.73   0.466     -.312403      .1433
> 21
               |
         _cons |    .3134051   .1191789     2.63   0.009     .0790105     .54779
> 96
---------------+--------------------------------------------------------------
> ——
```

```
86 . est sto cattle

87 . margins, predict() by(cattle)

Predictive margins                              Number of obs     =        383
Model VCE    : OLS

Expression   : Linear prediction, predict()
over         : cattle
```

	Delta-method				
	Margin	Std. Err.	t	P>|t|	[95% Conf. Interval]
cattle					
0-5%	.5	.0747629	6.69	0.000	.3529604 .6470396
6-15%	.225	.0215822	10.43	0.000	.1825533 .2674467
16-25%	.0183486	.022645	0.81	0.418	-.0261884 .0628856
26-35%	.0246914	.026269	0.94	0.348	-.0269731 .0763558
36-45%	-1.11e-16	.0378577	-0.00	1.000	-.0744564 .0744564
46-55%	.0833333	.0682489	1.22	0.223	-.0508949 .2175615
56+%	-5.55e-17	.0682489	-0.00	1.000	-.1342282 .1342282

```
88 . marginsplot,  ///
   >         title ("Cattle Dependence and Matrilineal Kinship Across Ethnic Grou
   > ps", color(black) size(medium)) ///
   >     ytitle("Predicted Liklihood of Matrilineal Kinship") xtitle("Historical
   > Dependence on Cattle") ///estt
   >         plot1opts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bl
   > ack) msiz(0))   ///
   >         graphregion(fcolor(white) ilcolor(white) lcolor(white))

  Variables that uniquely identify margins: cattle

89 . *graph export "Figures/cattle_matlin.pdf", replace
90 .
91 . *Figure A.8
92 . reg matlin plow i.country if etag==1
```

Source	SS	df	MS		
Model	8.37711249	26	.322196634	Number of obs	= 369
Residual	20.8478198	342	.060958537	F(26, 342)	= 5.29
				Prob > F	= 0.0000
				R-squared	= 0.2866
				Adj R-squared	= 0.2324
Total	29.2249322	368	.079415577	Root MSE	= .2469

matlin	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]
plow	-.0207372	.0736045	-0.28	0.778	-.1655118 .12473
country					
Botswana	5.16e-17	.1069099	0.00	1.000	-.2102837 .21028

```
 Burkina Faso |   .0769231   .1109456     0.69   0.489    -.1412986    .29514
> 48
       Ghana |   7.20e-17   .1032848     0.00   1.000    -.2031534    .20315
> 34
       Kenya |   .0037704   .1028093     0.04   0.971    -.1984478    .20598
> 86
     Lesotho |    .016849   .1224998     0.14   0.891    -.2240989    .25779
> 69
     Liberia |   5.67e-17   .1094258     0.00   1.000    -.2152322    .21523
> 22
   Madagascar |   8.23e-17   .1126929     0.00   1.000    -.2216585    .22165
> 85
      Malawi |   .4444444   .1199708     3.70   0.000     .208471    .68041
> 79
        Mali |   5.33e-17   .1109456     0.00   1.000    -.2182217    .21822
> 17
  Mozambique |   .3636364   .1147236     3.17   0.002     .1379837     .5892
> 89
     Namibia |         .2   .1407534     1.42   0.156    -.0768514    .47685
> 14
     Nigeria |   5.02e-17   .0967548     0.00   1.000    -.1903094    .19030
> 94
     Senegal |   6.30e-17   .1199708     0.00   1.000    -.2359735    .23597
> 35
 South Africa |   .0077765    .126497     0.06   0.951    -.2410336    .25658
> 65
    Tanzania |        .25   .0956231     2.61   0.009     .0619165    .43808
> 35
      Uganda |   .0017281   .1009821     0.02   0.986     -.196896    .20035
> 22
      Zambia |   .5714286   .1094258     5.22   0.000     .3561963    .78666
> 08
    Zimbabwe |   .1347158   .1082026     1.25   0.214    -.0781105    .34754
> 21
 Sierra Leone |   .1020737    .117345     0.87   0.385     -.128735    .33288
> 25
       Niger |         .2   .1407534     1.42   0.156    -.0768514    .47685
> 14
        Togo |   5.56e-17   .1234489     0.00   1.000    -.2428147    .24281
> 47
     Burundi |   8.11e-17   .1951899     0.00   1.000    -.3839238    .38392
> 38
    Cameroon |   8.37e-17   .0993858     0.00   1.000    -.1954844    .19548
> 44
             |   6.78e-17   .1511934     0.00   1.000    -.2973861    .29738
> 61
      Guinea |   6.94e-17   .1199708     0.00   1.000    -.2359735    .23597
> 35
             |
```

```
       _cons |  -6.94e-17   .0872916    -0.00   1.000    -.1716959    .17169
> 59
-------------+----------------------------------------------------------------

> ——

93 . est sto plow

94 . margins, predict() by(plow)

Predictive margins                              Number of obs     =        369
Model VCE    : OLS

Expression   : Linear prediction, predict()
over         : plow

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        plow |
          0  |   .0927536   .0132925     6.98   0.000     .0666082     .118899
          1  |  -1.14e-16   .0503978    -0.00   1.000    -.0991287    .0991287
------------------------------------------------------------------------------

95 . marginsplot,  ///
>         title ("Plow Use and Matrilineal Kinship Across Ethnic Groups", colo
> r(black) size(medium)) ///
>     ytitle("Predicted Liklihood of Matrilineal Kinship") xtitle("Historical
> Use of the Plow") ///estt
>         plot1opts(msymbol(O) mcolor(black) lcolor(black) ) ci1opts(lcolor(bl
> ack) msiz(0))   ///
>         graphregion(fcolor(white) ilcolor(white) lcolor(white))

  Variables that uniquely identify margins: plow

96 . *graph export "Figures/plow_matlin.pdf", replace
97 .
```

```
98 . reg matlin i.cattle plow i.country if etag==1
```

Source	SS	df	MS	Number of obs	=	369
				F(32, 336)	=	6.52
Model	11.190709	32	.349709657	Prob > F	=	0.0000
Residual	18.0342232	336	.053673283	R-squared	=	0.3829
				Adj R-squared	=	0.3241
Total	29.2249322	368	.079415577	Root MSE	=	.23167

matlin	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
cattle						
6-15%	-.1166602	.0855779	-1.36	0.174	-.2849961	.05167
16-25%	-.3197688	.0850169	-3.76	0.000	-.4870013	-.15253
26-35%	-.3502382	.0877611	-3.99	0.000	-.5228685	-.17760
36-45%	-.3593674	.0968957	-3.71	0.000	-.5499659	-.16876
46-55%	-.343236	.1121868	-3.06	0.002	-.563913	-.1225
56+%	-.3155928	.1095735	-2.88	0.004	-.5311294	-.10005
plow	-.0005857	.075218	-0.01	0.994	-.1485433	.14737
country						
Botswana	.0502547	.1104445	0.46	0.649	-.1669952	.26750
Burkina Faso	.0181568	.1048317	0.17	0.863	-.1880523	.22436
Ghana	-.0393398	.0973011	-0.40	0.686	-.2307359	.15205
Kenya	.022989	.0983073	0.23	0.815	-.1703862	.21636
Lesotho	.0466196	.1188409	0.39	0.695	-.1871463	.28038
Liberia	-.1746383	.1062791	-1.64	0.101	-.3836944	.03441
Madagascar	.0365856	.1080386	0.34	0.735	-.1759317	.24910
Malawi	.3230013	.1143331	2.83	0.005	.0981025	.54790

```
        Mali |  -.0531399   .1047345    -0.51   0.612    -.2591578     .1528
> 78
   Mozambique |   .3120511   .1079534     2.89   0.004     .0997014    .52440
> 08
     Namibia |   .2318344    .134472     1.72   0.086    -.0326787    .49634
> 75
     Nigeria |  -.1371567   .0936026    -1.47   0.144    -.3212776    .04696
> 41
     Senegal |  -.0233874   .1130181    -0.21   0.836    -.2456995    .19892
> 48
 South Africa |   .0393165   .1206349     0.33   0.745    -.1979783    .27661
> 14
    Tanzania |   .2019216   .0907777     2.22   0.027     .0233573    .38048
> 59
      Uganda |   .0175221   .0962343     0.18   0.856    -.1717756    .20681
> 99
      Zambia |   .3863178   .1079074     3.58   0.000     .1740587     .5985
> 77
    Zimbabwe |   .1191789   .1022246     1.17   0.245    -.0819019    .32025
> 98
 Sierra Leone |   .0587648   .1107651     0.53   0.596    -.1591156    .27664
> 52
       Niger |   .2326696   .1334002     1.74   0.082    -.0297351    .49507
> 43
        Togo |  -.0368146   .1166993    -0.32   0.753    -.2663678    .19273
> 86
     Burundi |   .0444319   .1847144     0.24   0.810    -.3189103    .40777
> 42
    Cameroon |  -.0802615   .0943865    -0.85   0.396    -.2659245    .10540
> 14
             |   -.189146   .1449366    -1.31   0.193    -.4742434    .09595
> 14
      Guinea |  -.0733864   .1136192    -0.65   0.519    -.2968811    .15010
> 82
             |
       _cons |   .3058062   .1168516     2.62   0.009     .0759534     .5356
> 59
-------------+----------------------------------------------------------------

> ——
```

```
 99 . est sto cattle_plow

100 .
101 .
102 . ******************************
103 . *** Statistics reported in text ***
104 . ******************************
105 .
106 . distinct country if respno~=""  // # of AB countries
```

	Observations	
	total	distinct
country	**41990**	**26**

```
107 . distinct respno if respno~=""   // # of AB respondents
```

	Observations	
	total	distinct
respno	**41990**	**41990**

```
108 . distinct cegroup if respno~=""  // # of AB country-ethnic groups
```

	Observations	
	total	distinct
cegroup	**40672**	**554**

```
109 . distinct egroup if respno~=""   // # of AB ethnic groups (can cross borders)
```

	Observations	
	total	distinct
egroup	**40672**	**511**

```
110 . distinct murdock                                  // # of EA ethnic groups in
    > SSA
```

	Observations	
	total	distinct
murdock	**38452**	**1272**

```
111 .
112 . distinct country if respno~="" & varmatlin==1 // # of AB countries w/ matlin
    >  variation
```

	Observations	
	total	distinct
country	**15596**	**9**

```
113 . distinct respno if respno~="" & varmatlin==1    // # of AB respondents w/ ma
    > tlin variation
```

	Observations	
	total	distinct
respno	**15596**	**15596**

```
114 . distinct cegroup if respno~="" & varmatlin==1   // # of AB country-ethnic gr
    > oups w/ matlin variation
```

	Observations	
	total	distinct
cegroup	**15267**	**213**

```
115 .
116 . distinct egroup if _mergeEA==3 & respno~=""     // # of AB ethnic groups mat
    > ched to EA
```

	Observations	
	total	distinct
egroup	**37228**	**386**

```
117 . distinct respno if _mergeEA==3 & respno~=""     // # of AB respondnets match
    > ed to EA
```

	Observations	
	total	distinct
respno	**37228**	**37228**

```
118 . distinct respno if respno~="" & egroup~=.       // # of AB respondents gave
    > ethnicity
```

	Observations	
	total	distinct
respno	**40672**	**40672**

```
119 . distinct respno if respno~="" & matlin~=.       // # of AB respondents with
    > descent rule info
```

	Observations	
	total	distinct
respno	**37198**	**37198**

```
120 . distinct egroup if respno~="" & matlin~=.       // # of AB ethnic groups wit
    > h descent rule info
```

	Observations	
	total	distinct
egroup	**37198**	**383**

```
121 . distinct country if respno~="" & matlin~=.      // # of AB countries with de
    > scent rule info
```

	Observations	
	total	distinct
country	**37198**	**26**

```
122 .
123 . tab matlin if etag==1           // prop. of matrilineal ethnic groups
```

Matrilineal Descent	Freq.	Percent	Cum.
Patrilineal/Mixed	**346**	**90.34**	**90.34**
Matrilineal	**37**	**9.66**	**100.00**
Total	**383**	**100.00**	

```
124 . tab matlin if respno~=""        // prop. of matrilineal respondents
```

Matrilineal Descent	Freq.	Percent	Cum.
Patrilineal/Mixed	32,073	86.22	86.22
Matrilineal	5,125	13.78	100.00
Total	37,198	100.00	

```
125 .
126 . tab country if matlin==1 & respno~="" // matrilineal countries
```

Country	Freq.	Percent	Cum.
Burkina Faso	17	0.33	0.33
Malawi	1,783	34.79	35.12
Mozambique	1,636	31.92	67.04
Namibia	629	12.27	79.32
Tanzania	429	8.37	87.69
Zambia	417	8.14	95.82
Zimbabwe	63	1.23	97.05
Sierra Leone	38	0.74	97.80
Niger	113	2.20	100.00
Total	5,125	100.00	

```
127 . tab country, summ(matlin)                                  // prop. of countrie
    > s that are matlin
```

	Summary of Matrilineal Descent		
Country	Mean	Std. Dev.	Freq.
Benin	0	0	1,075
Botswana	0	0	758
Burkina F	.01505757	.12183592	1,129
Ghana	0	0	2,321
Kenya	0	0	2,354
Lesotho	0	0	1,169
Liberia	0	0	1,103
Madagasca	0	0	845
Malawi	.75423012	.43063383	2,364
Mali	0	0	1,164
Mozambiqu	.74161378	.43784665	2,206
Namibia	.67200855	.46973269	936
Nigeria	0	0	2,217
Senegal	0	0	1,168
South Afr	0	0	1,435
Tanzania	.21721519	.41245471	1,975

Uganda	0	0	2,328
Zambia	.41451292	.49288279	1,006
Zimbabwe	.02691158	.16185961	2,341
Sierra Le	.03608737	.18659619	1,053
Niger	.09448161	.29261993	1,196
Togo	0	0	960
Burundi	0	0	1,072
Cameroon	0	0	689
	0	0	1,153
Guinea	0	0	1,181
Total	.13777622	.3446696	37,198

```
128 .
129 . bys matlin: tab matloc if etag==1       // prop. of matlin groups that are m
    > atlocal
```

-> matlin = Patrilineal/Mixed

Matrilocal Residence	Freq.	Percent	Cum.
Patrilocal/Mixed	341	99.13	99.13
Matrilocal	3	0.87	100.00
Total	344	100.00	

-> matlin = Matrilineal

Matrilocal Residence	Freq.	Percent	Cum.
Patrilocal/Mixed	6	16.22	16.22
Matrilocal	31	83.78	100.00
Total	37	100.00	

-> matlin = .

Matrilocal Residence	Freq.	Percent	Cum.
Patrilocal/Mixed	3	100.00	100.00
Total	3	100.00	

```
130 .
131 . egen mtag=tag(murdock)

132 . tab matlin if mtag==1   // prop. of EA groups that are matrilineal
```

Matrilineal Descent	Freq.	Percent	Cum.
Patrilineal/Mixed	**1,088**	**87.18**	**87.18**
Matrilineal	**160**	**12.82**	**100.00**
Total	**1,248**	**100.00**	

```
133 .
134 .
135 .
136 . ******************************
137 . *** Tables ****
138 . ******************************
139 .
140 . * Add number of group-country observations
141 . global est $dv $dv_eng $dv_politic $dv_civic engindexA_cattle polindexA_catt
    > le civindexA_cattle

142 . foreach e in $est {
      2. est restore `e'
      3. mat N_g =e(N_g)
      4. estadd scalar Nc=N_g[1,1]: `e'
      5. estadd scalar Nr=N_g[1,2]: `e'
      6. }
    (results engindexA are active now)
    (results polindexA are active now)
    (results civindexA are active now)
    (results z_polinterest are active now)
    (results z_poldiscuss are active now)
    (results z_polunderstand are active now)
    (results z_voted are active now)
    (results z_contactpol are active now)
    (results z_protest are active now)
    (results z_rally are active now)
    (results z_persuade are active now)
    (results z_campaign are active now)
    (results z_meeting are active now)
    (results z_commorg are active now)
    (results z_leader are active now)
    (results z_colaction are active now)
    (results engindexA_cattle are active now)
    (results polindexA_cattle are active now)
```

```
(results civindexA_cattle are active now)

143 .
144 .
145 . *Produce regression tables
146 .
147 .     * Index DVs
148 . * Table A.2
149 . esttab $dv  ///
    >         , star(* 0.10 ** 0.05 *** 0.01) se b(3) se(3) r2(2) label booktabs a
    > lignment(D{.}{.}{-1}) replace ///
    >     stats(Nc N,layout("\multicolumn{1}{c}{@}" "\multicolumn{1}{c}{@}") label
    > s("Ethnic Groups" "Individuals") f(0)) ///
    >         title(Matrilineality and the Gender Gap in Civic and Political Engag
    > ement and Participation\label{tab:dv})  ///
    >         drop( *country) ///
    >         transform(ln*: exp(@) exp(@)) ///
    >         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant) ///
    >         nonotes  nobaselevels  nogaps ///
    >     sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular}" "
    > \end{tabular}}") ///
    >         addnote("Multi-level models in which individuals are nested within c
    > ountry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{
    > **} p<0.05$, $^{***} p<0.01$")

\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Civic and Political Engagement a
> nd Participation\label{tab:dv}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Political Engagement Index}&\multicolu
> mn{1}{c}{Political Participation Index}&\multicolumn{1}{c}{Civic Participati
> on Index}\\
\midrule
Female              &      -0.243\sym{***}&      -0.241\sym{***}&      -0.219\
> sym{***}\\
                    &     (0.008)         &     (0.007)         &     (0.008)
>         \\
Matrilineal         &      -0.043         &      -0.083\sym{***}&      -0.179\
> sym{***}\\
                    &     (0.031)         &     (0.031)         &     (0.033)
>         \\
Female $\times$ Matrilineal&       0.083\sym{***}&       0.060\sym{***}&
>  0.113\sym{***}\\
```

```
                    &     (0.020)         &     (0.019)         &     (0.020)
>         \\
Constant            &      -0.005         &       0.325\sym{***}&       0.052
>         \\
                    &     (0.037)         &     (0.037)         &     (0.039)
>         \\
\midrule sd(Ethnic Group)&       0.101\sym{***}&       0.107\sym{***}&       0
> .109\sym{***}\\
                    &     (0.007)         &     (0.007)         &     (0.008)
>         \\
sd(Residual)        &       0.671\sym{***}&       0.633\sym{***}&       0.677\
> sym{***}\\
                    &     (0.002)         &     (0.002)         &     (0.002)
>         \\
\midrule
Ethnic Groups       &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}
>         &\multicolumn{1}{c}{383}         \\
Individuals         &\multicolumn{1}{c}{37198}         &\multicolumn{1}{c}{371
> 98}         &\multicolumn{1}{c}{37198}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{table}

150 . *Table A.5
151 . esttab $dv_eng  ///
    >         , star(* 0.10 ** 0.05 *** 0.01) se b(3) se(3) r2(2) label booktabs a
    > lignment(D{.}{.}{-1}) replace ///
    >     stats(Nc N,layout("\multicolumn{1}{c}{@}" "\multicolumn{1}{c}{@}") label
    > s("Ethnic Groups" "Individuals") f(0)) ///
    >         title(Matrilineality and the Gender Gap in Political Engagement Outc
    > omes\label{tab:dv_eng})  ///
    >         drop( *country) ///
    >         transform(ln*: exp(@) exp(@)) ///
    >         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant) ///
    >         nonotes  nobaselevels  nogaps ///
    >     sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular}" "
    > \end{tabular}}") ///
    >         addnote("Multi-level models in which individuals are nested within c
    > ountry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{
    > **} p<0.05$, $^{***} p<0.01$")
```

```
\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Political Engagement Outcomes\la
> bel{tab:dv_eng}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Interest in Politics}&\multicolumn{1}{
> c}{Discuss Politics}&\multicolumn{1}{c}{Understand Politics}\\
\midrule
Female              &      -0.316\sym{***}&      -0.382\sym{***}&      -0.136\
> sym{***}\\
                    &     (0.011)         &     (0.011)         &     (0.011)
>         \\
Matrilineal         &      -0.007         &       0.029         &      -0.103\
> sym{**} \\
                    &     (0.047)         &     (0.042)         &     (0.047)
>         \\
Female $\times$ Matrilineal&       0.080\sym{***}&       0.063\sym{**} &
>  0.097\sym{***}\\
                    &     (0.029)         &     (0.029)         &     (0.031)
>         \\
Constant            &      -0.071         &       0.221\sym{***}&      -0.132\
> sym{**} \\
                    &     (0.055)         &     (0.051)         &     (0.056)
>         \\
\midrule sd(Ethnic Group)&       0.156\sym{***}&       0.129\sym{***}&       0
> .151\sym{***}\\
                    &     (0.011)         &     (0.010)         &     (0.011)
>         \\
sd(Residual)        &       0.959\sym{***}&       0.956\sym{***}&       0.982\
> sym{***}\\
                    &     (0.004)         &     (0.004)         &     (0.004)
>         \\
\midrule
Ethnic Groups       &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}
>         &\multicolumn{1}{c}{382}         \\
Individuals         &\multicolumn{1}{c}{36782}         &\multicolumn{1}{c}{368
> 98}         &\multicolumn{1}{c}{35351}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{table}
```

```
152 . *Table A.6
153 . esttab $dv_civic  ///
    >         , star(* 0.10 ** 0.05 *** 0.01) se b(3) se(3) r2(2) label booktabs a
    > lignment(D{.}{.}{-1}) replace ///
    >     stats(Nc N,layout("\multicolumn{1}{c}{@}" "\multicolumn{1}{c}{@}") label
    > s("Ethnic Groups" "Individuals") f(0)) ///
    >         title(Matrilineality and the Gender Gap in Civic Participation Outco
    > mes\label{tab:dv_civic})  ///
    >         drop( *country) ///
    >         transform(ln*: exp(@) exp(@)) ///
    >         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant) ///
    >         nonotes  nobaselevels  nogaps ///
    >     substitute({table} {sidewaystable} \_ _ "\begin{tabular}" "\scalebox{0.7
    > }{\begin{tabular}" "\end{tabular}" "\end{tabular}}") ///
    >     addnote("Multi-level models in which individuals are nested within count
    > ry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{**}
    > p<0.05$, $^{***} p<0.01$")

\begin{sidewaystable}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Civic Participation Outcomes\lab
> el{tab:dv_civic}}
\scalebox{0.7}{\begin{tabular}{l*{4}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}&\multicolumn{1}{c}{(4)}\\
                    &\multicolumn{1}{c}{Ever Attend Community Meeting}&\multic
> olumn{1}{c}{Member of Community Organization}&\multicolumn{1}{c}{Leadership
> Experience}&\multicolumn{1}{c}{Join Others to Raise Issue}\\
\midrule
Female              &      -0.247\sym{***}&      -0.169\sym{***}&      -0.155\
> sym{***}&      -0.287\sym{***}\\
                    &     (0.010)         &     (0.011)         &     (0.011)
>         &     (0.010)         \\
Matrilineal         &      -0.185\sym{***}&      -0.167\sym{***}&      -0.167\
> sym{***}&      -0.176\sym{***}\\
                    &     (0.048)         &     (0.049)         &     (0.035)
>         &     (0.047)         \\
Female $\times$ Matrilineal&       0.131\sym{***}&       0.080\sym{***}&
>  0.080\sym{***}&       0.153\sym{***}\\
                    &     (0.028)         &     (0.029)         &     (0.030)
>         &     (0.027)         \\
Constant            &       0.128\sym{**} &       0.037         &       0.003
>         &       0.129\sym{**} \\
                    &     (0.055)         &     (0.057)         &     (0.044)
>         &     (0.054)         \\
\midrule sd(Ethnic Group)&       0.165\sym{***}&       0.167\sym{***}&       0
```

```
> .078\sym{***}&       0.165\sym{***}\\
                     &     (0.011)         &     (0.011)         &     (0.009)
>         &     (0.011)         \\
sd(Residual)         &       0.933\sym{***}&       0.963\sym{***}&       0.999
>         &       0.894\sym{***}\\
                     &     (0.003)         &     (0.004)         &     (0.004)
>         &     (0.003)         \\
\midrule
Ethnic Groups        &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}
>         &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}         \\
Individuals          &\multicolumn{1}{c}{37048}         &\multicolumn{1}{c}{369
> 41}         &\multicolumn{1}{c}{36878}         &\multicolumn{1}{c}{37006}
>       \\
\bottomrule
\multicolumn{5}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{5}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{sidewaystable}

154 . *Table A.7
155 . esttab $dv_politic  ///
    >         , star(* 0.10 ** 0.05 *** 0.01) se b(3) se(3) r2(2) label booktabs a
    > lignment(D{.}{.}{-1}) replace ///
    >     stats(Nc N,layout("\multicolumn{1}{c}{@}" "\multicolumn{1}{c}{@}") label
    > s("Ethnic Groups" "Individuals") f(0)) ///
    >         title(Matrilineality and the Gender Gap in Political Participation O
    > utcomes\label{tab:dv_politic})  ///
    >         drop( *country) ///
    >         transform(ln*: exp(@) exp(@)) ///
    >         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant) ///
    >         nonotes  nobaselevels  nogaps ///
    >         substitute({table} {sidewaystable} \_ _ "\begin{tabular}" "\scalebox
    > {0.7}{\begin{tabular}" "\end{tabular}" "\end{tabular}}") ///
    >         addnote("Multi-level models in which individuals are nested within c
    > ountry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{
    > **} p<0.05$, $^{***} p<0.01$")
```

```
\begin{sidewaystable}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Political Participation Outcomes
> \label{tab:dv_politic}}
\scalebox{0.7}{\begin{tabular}{l*{6}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}&\multicolumn{1}{c}{(4)}&\multicolumn{1}{c}{(5)}&\multicolumn{
> 1}{c}{(6)}\\
                    &\multicolumn{1}{c}{Voted in Last Election}&\multicolumn{1
> }{c}{Contacted Political Official}&\multicolumn{1}{c}{Ever Demonstrated}&\mu
> lticolumn{1}{c}{Attended Campaign Rally}&\multicolumn{1}{c}{Persuaded Others
>  on Vote}&\multicolumn{1}{c}{Worked for Campaign}\\
\midrule
Female              &      -0.105\sym{***}&      -0.287\sym{***}&      -0.144\
> sym{***}&      -0.253\sym{***}&      -0.256\sym{***}&      -0.282\sym{***}\\
                    &     (0.011)         &     (0.011)         &     (0.011)
>         &     (0.011)         &     (0.011)         &     (0.011)         \\
Matrilineal         &      -0.076\sym{**} &      -0.065         &      -0.109\
> sym{**} &       0.067         &      -0.141\sym{***}&      -0.127\sym{***}\\
                    &     (0.038)         &     (0.043)         &     (0.046)
>         &     (0.044)         &     (0.049)         &     (0.047)         \\
Female $\times$ Matrilineal&       0.083\sym{***}&       0.093\sym{***}&
>  0.046         &       0.041         &       0.083\sym{***}&       0.042
>      \\
                    &     (0.029)         &     (0.033)         &     (0.029)
>         &     (0.028)         &     (0.029)         &     (0.029)         \\
Constant            &       0.373\sym{***}&      -0.091\sym{*}  &       0.228\
> sym{***}&       0.446\sym{***}&       0.343\sym{***}&       0.412\sym{***}\\
                    &     (0.048)         &     (0.050)         &     (0.055)
>         &     (0.053)         &     (0.057)         &     (0.056)         \\
\midrule sd(Ethnic Group)&       0.102\sym{***}&       0.129\sym{***}&       0
> .149\sym{***}&       0.145\sym{***}&       0.169\sym{***}&       0.158\sym{*
> **}\\
                    &     (0.010)         &     (0.009)         &     (0.011)
>         &     (0.010)         &     (0.011)         &     (0.011)         \\
sd(Residual)        &       0.970\sym{***}&       0.928\sym{***}&       0.968\
> sym{***}&       0.941\sym{***}&       0.967\sym{***}&       0.976\sym{***}\\
                    &     (0.004)         &     (0.004)         &     (0.004)
>         &     (0.003)         &     (0.004)         &     (0.004)         \\
\midrule
Ethnic Groups       &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}
>         &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}         &\
> multicolumn{1}{c}{383}         &\multicolumn{1}{c}{383}         \\
Individuals         &\multicolumn{1}{c}{37077}         &\multicolumn{1}{c}{345
> 42}         &\multicolumn{1}{c}{36549}         &\multicolumn{1}{c}{37077}
>       &\multicolumn{1}{c}{37048}         &\multicolumn{1}{c}{37037}
> \\
\bottomrule
```

```
\multicolumn{7}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{7}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{sidewaystable}

156 .
157 . * Including Individual-Level Controls
158 . *Table A.3
159 . esttab engindexA_con polindexA_con civindexA_con   ///
    >         , star(* 0.10 ** 0.05 *** 0.01)  b(3) se(3) r2(2) label booktabs ali
    > gnment(D{.}{.}{-1}) replace ///
    >         stats(N,layout("\multicolumn{1}{c}{@}") labels("Observations (Indivi
    > dual)") f(0))  ///
    >         title(Matrilineality and the Gender Gap in Civic and Political Outco
    > me, Controlling for Demographics \label{tab:dv_controls} )  ///
    >         drop( *country) ///
    >         transform(ln*: exp(@) exp(@)) ///
    >         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant ///
    >         1.urban Urban 1.female#1.urban  "Female $\times$ Urban" 1.employed E
    > mployed 1.female#1.employed  "Female $\times$ Employed" ///
    >     age "Age" 1.female#c.age  "Female $\times$ Age" wealth "Wealth Index" 1.
    > female#c.wealth  "Female $\times$ Wealth" ///
    >     edu "Education Level" 1.female#c.edu  "Female $\times$ Education") ///
    >         nonotes  nobaselevels nogaps ///
    >     refcat(1.cattle "\textit{Cattle Dependence}", nolabel) ///
    >         sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular
    > }" "\end{tabular}}" % \%) ///
    >         addnote("Multi-level models in which individuals are nested within c
    > ountry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{
    > **} p<0.05$, $^{***} p<0.01$")

\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Civic and Political Outcome, Con
> trolling for Demographics \label{tab:dv_controls}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Political Engagement Index}&\multicolu
> mn{1}{c}{Political Participation Index}&\multicolumn{1}{c}{Civic Participati
> on Index}\\
\midrule
Female              &      -0.120\sym{***}&      -0.204\sym{***}&      -0.155\
> sym{***}\\
```

```
                    &     (0.026)         &     (0.025)         &     (0.026)
>         \\
Matrilineal         &      -0.029         &      -0.088\sym{***}&      -0.184\
> sym{***}\\
                    &     (0.031)         &     (0.031)         &     (0.033)
>         \\
Female $\times$ Matrilineal&       0.079\sym{***}&       0.060\sym{***}&
>  0.110\sym{***}\\
                    &     (0.021)         &     (0.019)         &     (0.020)
>         \\
Age                 &       0.003\sym{***}&       0.003\sym{***}&       0.009\
> sym{***}\\
                    &     (0.000)         &     (0.000)         &     (0.000)
>         \\
Female $\times$ Age &      -0.001\sym{*}  &       0.000         &      -0.001\
> sym{**} \\
                    &     (0.001)         &     (0.000)         &     (0.001)
>         \\
Wealth Index        &      -0.010\sym{***}&       0.027\sym{***}&       0.026\
> sym{***}\\
                    &     (0.003)         &     (0.003)         &     (0.003)
>         \\
Female $\times$ Wealth&       0.002         &      -0.008\sym{*}  &       0.00
> 4         \\
                    &     (0.005)         &     (0.004)         &     (0.005)
>         \\
Education Level     &       0.069\sym{***}&       0.041\sym{***}&       0.037\
> sym{***}\\
                    &     (0.003)         &     (0.003)         &     (0.003)
>         \\
Female $\times$ Education&      -0.016\sym{***}&      -0.010\sym{***}&       0
> .004         \\
                    &     (0.004)         &     (0.004)         &     (0.004)
>         \\
Urban               &      -0.041\sym{***}&      -0.123\sym{***}&      -0.222\
> sym{***}\\
                    &     (0.011)         &     (0.011)         &     (0.011)
>         \\
Female $\times$ Urban&       0.002         &       0.061\sym{***}&       0.058
> \sym{***}\\
                    &     (0.016)         &     (0.015)         &     (0.015)
>         \\
Employed            &       0.043\sym{***}&       0.060\sym{***}&       0.061\
> sym{***}\\
                    &     (0.011)         &     (0.010)         &     (0.011)
>         \\
Female $\times$ Employed&       0.013         &       0.025\sym{*}  &       0.
> 022         \\
                    &     (0.016)         &     (0.015)         &     (0.016)
```

```
>         \\
Constant              &      -0.249\sym{***}&       0.132\sym{***}&      -0.297\
> sym{***}\\
                      &     (0.040)         &     (0.040)         &     (0.042)
>         \\
\midrule sd(Ethnic Group)&       0.096\sym{***}&       0.105\sym{***}&       0
> .110\sym{***}\\
                      &     (0.007)         &     (0.007)         &     (0.008)
>         \\
sd(Residual)          &       0.662\sym{***}&       0.627\sym{***}&       0.659\
> sym{***}\\
                      &     (0.002)         &     (0.002)         &     (0.002)
>         \\
\midrule
Observations (Individual)&\multicolumn{1}{c}{36230}         &\multicolumn{1}{c
> }{36230}         &\multicolumn{1}{c}{36230}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{table}

160 .
161 .
162 . * Country Random Effects
163 . *Table A.4
164 . esttab engindexA_re polindexA_re civindexA_re   ///
>         , star(* 0.10 ** 0.05 *** 0.01)  b(3) se(3) r2(2) label booktabs ali
> gnment(D{.}{.}{-1}) replace ///
>         stats(N,layout("\multicolumn{1}{c}{@}") labels("Observations (Indivi
> dual)") f(0))  ///
>         title(Matrilineality and the Gender Gap in Civic and Political Outco
> me, with Country Random Effects \label{tab:dv_re} )  ///
>         transform(ln*: exp(@) exp(@)) ///
>         eqlabels("" "\midrule sd(Country)" "sd(Ethnic Group)" "sd(Residual)"
> , none) ///
>         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
> ineal" 1.matlin Matrilineal _cons Constant) ///
>         nonotes  nobaselevels nogaps ///
>     refcat(1.cattle "\textit{Cattle Dependence}", nolabel) ///
>         sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular
> }" "\end{tabular}}" % \%) ///
>         addnote("Multi-level models in which individuals are nested within c
> ountry-specific ethnic groups and countries." "$^* p<0.10$, $^{**} p<0.05$,
> $^{***} p<0.01$")
```

```
\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Civic and Political Outcome, wit
> h Country Random Effects \label{tab:dv_re}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Political Engagement Index}&\multicolu
> mn{1}{c}{Political Participation Index}&\multicolumn{1}{c}{Civic Participati
> on Index}\\
\midrule
Female              &      -0.243\sym{***}&      -0.241\sym{***}&      -0.218\
> sym{***}\\
                    &     (0.007)         &     (0.007)         &     (0.008)
>         \\
Matrilineal         &      -0.037         &      -0.083\sym{***}&      -0.171\
> sym{***}\\
                    &     (0.031)         &     (0.031)         &     (0.033)
>         \\
Female $\times$ Matrilineal&       0.083\sym{***}&       0.060\sym{***}&
>  0.112\sym{***}\\
                    &     (0.020)         &     (0.019)         &     (0.020)
>         \\
Constant            &       0.090\sym{***}&       0.142\sym{***}&       0.128\
> sym{***}\\
                    &     (0.028)         &     (0.031)         &     (0.047)
>         \\
\midrule sd(Country)&       0.131\sym{***}&       0.152\sym{***}&       0.235\
> sym{***}\\
                    &     (0.020)         &     (0.023)         &     (0.034)
>         \\
sd(Ethnic Group)    &       0.109\sym{***}&       0.115\sym{***}&       0.116\
> sym{***}\\
                    &     (0.008)         &     (0.007)         &     (0.008)
>         \\
sd(Residual)        &       0.670\sym{***}&       0.633\sym{***}&       0.676\
> sym{***}\\
                    &     (0.002)         &     (0.002)         &     (0.002)
>         \\
\midrule
Observations (Individual)&\multicolumn{1}{c}{37198}         &\multicolumn{1}{c
> }{37198}         &\multicolumn{1}{c}{37198}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups and countries.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
```

```
\end{table}

. 
. 
. * Controlling for Cattle/Plow
. *Table A.8
. esttab engindexA_cattle polindexA_cattle civindexA_cattle   ///
>         , star(* 0.10 ** 0.05 *** 0.01)  b(3) se(3) r2(2) label booktabs ali
> gnment(D{.}{.}{-1}) replace ///
>         stats(N,layout("\multicolumn{1}{c}{@}") labels("Observations (Indivi
> dual)") f(0))  ///
>         title(Matrilineality and the Gender Gap in Civic and Political Outco
> me, Controlling for Cattle Dependence and Plow Use \label{tab:dv_cattle} )
> ///
>         drop( *country) ///
>         transform(ln*: exp(@) exp(@)) ///
>         eqlabels("" "\midrule sd(Ethnic Group)" "sd(Residual)", none) ///
>         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
> ineal" 1.matlin Matrilineal _cons Constant ///
>     1.plow "Plow Use" 1.female#1.plow "Female $\times$ Plow Use") ///
>         nonotes  nobaselevels nogaps ///
>     refcat(1.cattle "\textit{Cattle Dependence}", nolabel) ///
>         sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular
> }" "\end{tabular}}" % \%) ///
>         addnote("Multi-level models in which individuals are nested within c
> ountry-specific ethnic groups with country fixed effects." "$^* p<0.10$, $^{
> **} p<0.05$, $^{***} p<0.01$")

\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Matrilineality and the Gender Gap in Civic and Political Outcome, Con
> trolling for Cattle Dependence and Plow Use \label{tab:dv_cattle}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Political Engagement Index}&\multicolu
> mn{1}{c}{Political Participation Index}&\multicolumn{1}{c}{Civic Participati
> on Index}\\
\midrule
Female              &      -0.257\sym{***}&      -0.271\sym{***}&      -0.244\
> sym{***}\\
                    &     (0.028)         &     (0.027)         &     (0.029)
>         \\
Matrilineal         &      -0.060\sym{*}  &      -0.121\sym{***}&      -0.180\
> sym{***}\\
                    &     (0.036)         &     (0.034)         &     (0.035)
>         \\
Female $\times$ Matrilineal&       0.100\sym{***}&       0.081\sym{***}&
```

```
>  0.127\sym{***}\\
                    &     (0.025)         &     (0.023)         &     (0.025)
>         \\
\textit{Cattle Dependence}&                     &                     &
>               \\
6-15\%               &       0.013         &      -0.013         &       0.127
> \sym{**} \\
                    &     (0.059)         &     (0.056)         &     (0.058)
>         \\
16-25\%              &       0.035         &       0.037         &       0.131
> \sym{**} \\
                    &     (0.059)         &     (0.056)         &     (0.059)
>         \\
26-35\%              &      -0.052         &      -0.009         &       0.152
> \sym{**} \\
                    &     (0.062)         &     (0.059)         &     (0.061)
>         \\
36-45\%              &      -0.039         &      -0.030         &       0.107
>          \\
                    &     (0.066)         &     (0.063)         &     (0.065)
>         \\
 46-55\%             &       0.063         &      -0.066         &       0.071
>          \\
                    &     (0.085)         &     (0.080)         &     (0.084)
>         \\
56+\%                &      -0.003         &      -0.018         &       0.132
> \sym{*}  \\
                    &     (0.075)         &     (0.071)         &     (0.074)
>         \\
Female $\times$ 6-15\%&      -0.009         &       0.029         &      -0.02
> 3         \\
                    &     (0.032)         &     (0.030)         &     (0.032)
>         \\
Female $\times$ 16-25\%&      -0.023         &      -0.001         &       0.0
> 06         \\
                    &     (0.032)         &     (0.030)         &     (0.032)
>         \\
Female $\times$ 26-35\%&       0.035         &       0.031         &       0.0
> 51         \\
                    &     (0.034)         &     (0.032)         &     (0.034)
>         \\
Female $\times$ 36-45\%&       0.068\sym{*}  &       0.062\sym{*}  &       0.1
> 11\sym{***}\\
                    &     (0.035)         &     (0.033)         &     (0.035)
>         \\
Female $\times$  46-55\%&      -0.001         &       0.078         &       0.
> 061         \\
                    &     (0.070)         &     (0.065)         &     (0.070)
>         \\
```

```
Female $\times$ 56+\%&       0.058         &       0.012         &      -0.092
> \sym{*}  \\
                     &     (0.048)         &     (0.045)         &     (0.048)
>         \\
Plow Use             &      -0.032         &      -0.064         &      -0.054
>         \\
                     &     (0.052)         &     (0.050)         &     (0.052)
>         \\
Female $\times$ Plow Use&       0.050         &       0.060\sym{*}  &       0.
> 093\sym{**} \\
                     &     (0.039)         &     (0.036)         &     (0.039)
>         \\
Constant             &      -0.004         &       0.321\sym{***}&      -0.071
>         \\
                     &     (0.068)         &     (0.065)         &     (0.068)
>         \\
\midrule sd(Ethnic Group)&       0.101\sym{***}&       0.096\sym{***}&       0
> .098\sym{***}\\
                     &     (0.008)         &     (0.007)         &     (0.008)
>         \\
sd(Residual)         &       0.673\sym{***}&       0.632\sym{***}&       0.679\
> sym{***}\\
                     &     (0.003)         &     (0.002)         &     (0.003)
>         \\
\midrule
Observations (Individual)&\multicolumn{1}{c}{35054}         &\multicolumn{1}{c
> }{35054}         &\multicolumn{1}{c}{35054}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Multi-level models in which individuals are n
> ested within country-specific ethnic groups with country fixed effects.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{table}
```

170 .
171 .

```
172 . * Correlates of Matrilineality (Ethnic Group Level)
173 . *Table A.9
174 . esttab cattle plow cattle_plow   ///
    >         , star(* 0.10 ** 0.05 *** 0.01) se b(3) se(3) r2(2) label booktabs a
    > lignment(D{.}{.}{-1}) replace ///
    >         stats(N,layout("\multicolumn{1}{c}{@}") labels("Ethnic Groups") f(0)
    > )  ///
    >         title(Relationship Between Cattle Dependence/Plow Use and Matrilinea
    > l Kinship \label{tab:cattle} ) ///
    >         drop(*country) eqlab(, none) ///
    >         varlabels (1.female Female 1.female#1.matlin "Female $\times$ Matril
    > ineal" 1.matlin Matrilineal _cons Constant) ///
    >         nonotes  nobaselevels  nogaps ///
    >     refcat(1.cattle "\textit{Cattle Dependence}", nolabel) ///
    >         sub("\begin{tabular}" "\scalebox{0.7}{\begin{tabular}" "\end{tabular
    > }" "\end{tabular}}" % \%) ///
    >         addnote("Linear model with country fixed effects." "$^* p<0.10$, $^{
    > **} p<0.05$, $^{***} p<0.01$")

\begin{table}[htbp]\centering
\def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
\caption{Relationship Between Cattle Dependence/Plow Use and Matrilineal Kinsh
> ip \label{tab:cattle}}
\scalebox{0.7}{\begin{tabular}{l*{3}{D{.}{.}{-1}}}
\toprule
                    &\multicolumn{1}{c}{(1)}&\multicolumn{1}{c}{(2)}&\multicol
> umn{1}{c}{(3)}\\
                    &\multicolumn{1}{c}{Matrilineal Descent}&\multicolumn{1}{c
> }{Matrilineal Descent}&\multicolumn{1}{c}{Matrilineal Descent}\\
\midrule
\textit{Cattle Dependence}&                        &                        &
>               \\
6-15\%              &      -0.096         &                        &      -0.117
>          \\
                    &     (0.087)         &                        &     (0.086)
>         \\
16-25\%             &      -0.334\sym{***}&                        &      -0.320
> \sym{***}\\
                    &     (0.087)         &                        &     (0.085)
>         \\
26-35\%             &      -0.359\sym{***}&                        &      -0.350
> \sym{***}\\
                    &     (0.089)         &                        &     (0.088)
>         \\
36-45\%             &      -0.364\sym{***}&                        &      -0.359
> \sym{***}\\
                    &     (0.098)         &                        &     (0.097)
>         \\
 46-55\%            &      -0.349\sym{***}&                        &      -0.343
```

```
> \sym{***}\\
                    &     (0.112)         &                     &     (0.112)
>         \\
56+\%                &      -0.315\sym{***}&                     &      -0.316
> \sym{***}\\
                    &     (0.110)         &                     &     (0.110)
>         \\
Plow Use            &                     &      -0.021         &      -0.001
>         \\
                    &                     &     (0.074)         &     (0.075)
>         \\
Constant            &       0.313\sym{***}&      -0.000         &       0.306\
> sym{***}\\
                    &     (0.119)         &     (0.087)         &     (0.117)
>         \\
\midrule
Ethnic Groups       &\multicolumn{1}{c}{383}         &\multicolumn{1}{c}{369}
>         &\multicolumn{1}{c}{369}         \\
\bottomrule
\multicolumn{4}{l}{\footnotesize Linear model with country fixed effects.}\\
\multicolumn{4}{l}{\footnotesize $^* p<0.10$, $^{**} p<0.05$, $^{***} p<0.01$}
> \\
\end{tabular}}
\end{table}

175 .
176 .
177 .
178 .
179 .
180 .
181 .
182 . ***** Summary Statistics *****
183 .
184 . global dv_vars matlin $dv $dv_eng $dv_politic $dv_civic

185 .
```

```
186 .
187 . *latex tables
188 . foreach v of varlist $dv_eng $dv_politic $dv_civic   {
      2.         label variable `v' `"\hspace{0.1cm} `: variable label `v''"'
      3.         }

189 .
190 . set more off

191 . estpost su $dv_vars if female==0

                 |  e(count)   e(sum_w)    e(mean)     e(Var)      e(sd)     e(min
    > )
    -------------+------------------------------------------------------------
    > --
         matlin |     19605      19605   .1369039   .1181672   .3437546
    > 0
      engindexA |     22043      22043   .1108551   .4831515    .695091  -1.12981
    > 7
      polindexA |     22043      22043   .1063993   .4728352   .6876301   -.65680
    > 4
      civindexA |     22043      22043   .0934075    .544765    .738082   -1.0211
    > 2
    z_polinter~t |     20822      20822   .1513236   .9525665   .9759951     -1.51
    > 7
    z_poldiscuss |     20859      20859    .184151   1.005595   1.002794  -1.22911
    > 4
    z_polunder~d |     20273      20273   .0629442   1.075411    1.03702   -.93455
    > 8
        z_voted |     20927      20927   .0500484    .941328   .9702206  -1.70810
    > 6
    z_contactpol |     19606      19606    .138311   1.076799   1.037689  -.711694
    > 9
      z_protest |     20664      20664   .0693676   1.116064   1.056439  -.528334
    > 1
        z_rally |     20922      20922   .1194386   1.021773   1.010828  -.860528
    > 3
      z_persuade |     20904      20904   .1178726   1.120557   1.058564  -.580933
    > 3
      z_campaign |     20903      20903   .1288959   1.208102   1.099137  -.454934
    > 4
      z_meeting |     20904      20904   .1122452   .9829425   .9914346  -1.68132
    > 6
      z_commorg |     20849      20849   .0744763   1.098884   1.048276  -.713419
    > 1
       z_leader |     20809      20809   .0660453   1.167418   1.080471  -.340067
    > 4
     z_colaction |     20893      20893   .1318015    .984708   .9923245  -1.52070
    > 8
```

	e(max)	e(sum)
matlin	1	2684
engindexA	1.769643	2443.579
polindexA	2.041028	2345.359
civindexA	2.071195	2058.981
z_polinter~t	1.183601	3150.859
z_poldiscuss	1.536169	3841.205
z_polunder~d	2.120641	1276.067
z_voted	.5854297	1047.364
z_contactpol	1.405061	2711.725
z_protest	4.340938	1433.412
z_rally	1.162049	2498.894
z_persuade	1.721327	2464.01
z_campaign	2.198067	2694.312
z_meeting	1.332868	2346.373
z_commorg	2.377042	1552.757
z_leader	2.940523	1374.337
z_colaction	1.450858	2753.728

```
192 . est store A

193 . estpost su $dv_vars if female==1
```

	e(count)	e(sum_w)	e(mean)	e(Var)	e(sd)	e(min)
matlin	18628	18628	.1383401	.1192085	.3452659	0
engindexA	21005	21005	-.1163332	.4387643	.6623929	-1.12981
polindexA	21005	21005	-.1116572	.3561679	.596798	-.65680
civindexA	21005	21005	-.0980234	.4763511	.6901819	-1.0211
z_polinter~t	20697	20697	-.1522375	1.001553	1.000776	-1.51
z_poldiscuss	20793	20793	-.1847355	.9262857	.9624374	-1.22911
z_polunder~d	19635	19635	-.0649894	.913875	.9559681	-.93455
z_voted	20914	20914	-.0500796	1.053742	1.026519	-1.70810
z_contactpol	19428	19428	-.1395782	.8837591	.9400846	-.711694
z_protest	20565	20565	-.0697015	.8737319	.9347363	-.528334

```
     z_rally |     20922      20922  -.1194386   .9497427   .9745474  -.860528
> 3
  z_persuade |     20910      20910  -.1178388   .8517482    .922902  -.580933
> 3
  z_campaign |     20898      20898  -.1289268   .7586539   .8710074  -.454934
> 4
   z_meeting |     20889      20889  -.1123258   .9918912   .9959374  -1.68132
> 6
   z_commorg |     20834      20834  -.0745299   .8899872   .9433913  -.713419
> 1
    z_leader |     20798      20798  -.0660803   .8238102   .9076399  -.340067
> 4
 z_colaction |     20862      20862  -.1319973   .9805402   .9902223  -1.52070
> 8
```

	e(max)	e(sum)
matlin	1	2577
engindexA	1.769643	-2443.578
polindexA	2.041028	-2345.36
civindexA	2.071195	-2058.981
z_polinter~t	1.183601	-3150.86
z_poldiscuss	1.536169	-3841.205
z_polunder~d	2.120641	-1276.067
z_voted	.5854297	-1047.365
z_contactpol	1.405061	-2711.726
z_protest	4.340938	-1433.411
z_rally	1.162049	-2498.895
z_persuade	1.721327	-2464.01
z_campaign	2.198067	-2694.311
z_meeting	1.332868	-2346.374
z_commorg	2.377042	-1552.757
z_leader	2.940523	-1374.337
z_colaction	1.450858	-2753.728

```
194 . est store B
```

```
195 . estpost su $dv_vars

             |  e(count)   e(sum_w)    e(mean)     e(Var)      e(sd)     e(min
> )
-------------+------------------------------------------------------------
> ——
      matlin |     38233      38233   .1376036    .118672    .344488
> 0
   engindexA |     43048      43048   2.23e-08   .4743788   .6887516  -1.12981
> 7
   polindexA |     43048      43048  -1.24e-08    .427779   .6540482   -.65680
> 4
   civindexA |     43048      43048   6.26e-09   .5205274   .7214758   -1.0211
> 2
z_polinter~t |     41519      41519  -4.50e-09          1          1     -1.51
> 7
z_poldiscuss |     41652      41652   1.21e-08          1          1  -1.22911
> 4
z_polunder~d |     39908      39908  -1.50e-08          1          1   -.93455
> 8
     z_voted |     41841      41841  -2.79e-08          1          1  -1.70810
> 6
z_contactpol |     39034      39034  -9.46e-09          1          1  -.711694
> 9
   z_protest |     41229      41229   1.23e-08          1          1  -.528334
> 1
     z_rally |     41844      41844  -3.10e-08          1          1  -.860528
> 3
  z_persuade |     41814      41814  -1.60e-08          1          1  -.580933
> 3
  z_campaign |     41801      41801   1.31e-08          1          1  -.454934
> 4
   z_meeting |     41793      41793  -2.94e-09          1          1  -1.68132
> 6
   z_commorg |     41683      41683   1.31e-08          1          1  -.713419
> 1
    z_leader |     41607      41607   1.22e-09          1          1  -.340067
> 4
 z_colaction |     41755      41755  -4.90e-09          1          1  -1.52070
> 8
```

```
             |    e(max)     e(sum)
-------------+----------------------
      matlin |         1       5261
   engindexA | 1.769643   .0009591
   polindexA | 2.041028  -.0005337
   civindexA | 2.071195   .0002697
z_polinter~t | 1.183601  -.0001868
z_poldiscuss | 1.536169   .0005026
z_polunder~d | 2.120641  -.0005975
     z_voted | .5854297  -.0011659
z_contactpol | 1.405061  -.0003692
   z_protest | 4.340938   .0005091
     z_rally | 1.162049  -.0012985
  z_persuade | 1.721327  -.0006677
  z_campaign | 2.198067   .0005462
   z_meeting | 1.332868  -.0001228
   z_commorg | 2.377042   .0005471
    z_leader | 2.940523   .0000506
 z_colaction | 1.450858  -.0002046

196 . est store C

197 .
198 . * Table A.1
199 . esttab A B C , replace booktabs ///
    >                 mtitle("\textbf{Men}" "\textbf{Women}" "\textbf{Overall}") /
    > //
    >                 cells(mean(fmt(2))) label  nonum  collabels(none) gaps  noob
    > s ///
    >                 order(matlin engindexA $dv_eng polindexA $dv_politic civinde
    > xA $dv_civic ) ///
    >                 refcat(matlin "\textbf{Descent Type}" engindexA "\textbf{Pol
    > itical Engagement}" polindexA "\textbf{Political Participation}" civindexA "
    > \textbf{Civic Participation}", nolabel)

    {
    \def\sym#1{\ifmmode^{#1}\else\(^{#1}\)\fi}
    \begin{tabular}{l*{3}{c}}
    \toprule
                      &\multicolumn{1}{c}{\textbf{Men}}&\multicolumn{1}{c}{\text
    > bf{Women}}&\multicolumn{1}{c}{\textbf{Overall}}\\
    \midrule
    \textbf{Descent Type}&            &            &            \\
    \addlinespace
    Matrilineal Descent &        0.14&        0.14&        0.14\\
    \addlinespace
    \textbf{Political Engagement}&            &            &            \\
    \addlinespace
    Political Engagement Index&        0.11&       -0.12&        0.00\\
```

```
\addlinespace
\hspace{0.1cm} Interest in Politics&        0.15&       -0.15&       -0.00\\
\addlinespace
\hspace{0.1cm} Discuss Politics&        0.18&       -0.18&        0.00\\
\addlinespace
\hspace{0.1cm} Understand Politics&        0.06&       -0.06&       -0.00\\
\addlinespace
\textbf{Political Participation}&            &            &            \\
\addlinespace
Political Participation Index&        0.11&       -0.11&       -0.00\\
\addlinespace
\hspace{0.1cm} Voted in Last Election&        0.05&       -0.05&       -0.00\\
\addlinespace
\hspace{0.1cm} Contacted Political Official&        0.14&       -0.14&       -
> 0.00\\
\addlinespace
\hspace{0.1cm} Ever Demonstrated&        0.07&       -0.07&        0.00\\
\addlinespace
\hspace{0.1cm} Attended Campaign Rally&        0.12&       -0.12&       -0.00\
> \
\addlinespace
\hspace{0.1cm} Persuaded Others on Vote&        0.12&       -0.12&       -0.00
> \\
\addlinespace
\hspace{0.1cm} Worked for Campaign&        0.13&       -0.13&        0.00\\
\addlinespace
\textbf{Civic Participation}&            &            &            \\
\addlinespace
Civic Participation Index&        0.09&       -0.10&        0.00\\
\addlinespace
\hspace{0.1cm} Ever Attend Community Meeting&        0.11&       -0.11&
> -0.00\\
\addlinespace
\hspace{0.1cm} Member of Community Organization&        0.07&       -0.07&
>     0.00\\
\addlinespace
\hspace{0.1cm} Leadership Experience&        0.07&       -0.07&        0.00\\
\addlinespace
\hspace{0.1cm} Join Others to Raise Issue&        0.13&       -0.13&       -0.
> 00\\
\bottomrule
\end{tabular}
}
```

```
200 .
201 .
202 . * Close log and convert log file
203 . log close
          name:  <unnamed>
           log:  /Users/robinson.1012/Dropbox/Research/Matrilineality/Submissions/
    > BJPS/Replication/DataverseFiles/RG_Matlin_XNat_log.smcl
      log type:  smcl
     closed on:  11 Dec 2018, 10:30:55
    ------------------------------------------------------------------------------
```