. \* STATA Model 1a: Empty Model for Daily Glucose Outcome

. xtmixed lglucAM , || id: , ///

> variance ml covariance(un) residuals(independent,t(day))

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 970.72808

Iteration 1: log likelihood = 970.72808

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(0) = .

Log likelihood = 970.72808 Prob > chi2 = .

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_cons | 4.942683 .0181322 272.59 0.000 4.907145 4.978221

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .0665423 .0066897 .0546417 .0810348

-----------------------------+------------------------------------------------

var(Residual) | .0302851 .0006829 .0289757 .0316537

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

LR test vs. linear regression: chibar2(01) = 4024.09 Prob >= chibar2 = 0.0000

.

. \* STATA Model 1b: Empty Model for Daily Negative Mood Predictors

. xtmixed negmood , || id: , ///

> variance ml covariance(un) residuals(independent,t(day))

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = -4815.1935

Iteration 1: log likelihood = -4815.1935

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(0) = .

Log likelihood = -4815.1935 Prob > chi2 = .

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

negmood | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_cons | .1597403 .0418067 3.82 0.000 .0778007 .24168

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .3355036 .0355674 .2725584 .4129855

-----------------------------+------------------------------------------------

var(Residual) | .525824 .0118575 .5030898 .5495855

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

LR test vs. linear regression: chibar2(01) = 1500.40 Prob >= chibar2 = 0.0000

.

. \* STATA Model 2a: Fixed Effects of Negative Mood using PMC

. xtmixed lglucAM c.WPnm c.PMnm0, || id: , ///

> variance ml covariance(un) residuals(independent,t(day)),

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 978.269

Iteration 1: log likelihood = 978.269

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(2) = 15.20

Log likelihood = 978.269 Prob > chi2 = 0.0005

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

WPnm | .0109743 .0038207 2.87 0.004 .0034859 .0184626

PMnm0 | .0803976 .030461 2.64 0.008 .0206952 .1401

\_cons | 4.930171 .0184512 267.20 0.000 4.894008 4.966335

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .0643486 .0064737 .0528329 .0783743

-----------------------------+------------------------------------------------

var(Residual) | .0302214 .0006815 .0289147 .031587

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

LR test vs. linear regression: chibar2(01) = 3941.45 Prob >= chibar2 = 0.0000

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 978.269 5 -1946.538 -1929.874

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

Note: N=207 used in calculating BIC

. predict predmood,

(option xb assumed)

. estimates store FixWP,

. lincom 1\*WPnm // within-person mood effect

( 1) [lglucAM]WPnm = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0109743 .0038207 2.87 0.004 .0034859 .0184626

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

. lincom 1\*PMnm0 // between-person mood effect

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0803976 .030461 2.64 0.008 .0206952 .1401

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

. lincom 1\*PMnm0 - 1\*WPnm // contextual mood effect

( 1) - [lglucAM]WPnm + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0694233 .0306963 2.26 0.024 .0092597 .129587

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

. corr lglucAM predmood

(obs=4140)

| lglucAM predmood

-------------+------------------

lglucAM | 1.0000

predmood | 0.1527 1.0000

.

. \* STATA Model 2b: Random Effect of WP Negative Mood using PMC

. xtmixed lglucAM c.WPnm c.PMnm0, || id: WPnm, ///

> variance ml covariance(un) residuals(independent,t(day)),

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 979.21591

Iteration 1: log likelihood = 979.72258

Iteration 2: log likelihood = 979.72265

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(2) = 14.03

Log likelihood = 979.72265 Prob > chi2 = 0.0009

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

WPnm | .0110375 .0041371 2.67 0.008 .0029288 .0191462

PMnm0 | .0802152 .030471 2.63 0.008 .0204931 .1399372

\_cons | 4.930206 .0184585 267.10 0.000 4.894028 4.966384

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Unstructured |

var(WPnm) | .0005056 .0003348 .0001381 .0018515

var(\_cons) | .0644045 .0064789 .0528795 .0784413

cov(WPnm,\_cons) | -.0002049 .001067 -.0022962 .0018865

-----------------------------+------------------------------------------------

var(Residual) | .029953 .000692 .0286269 .0313406

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

LR test vs. linear regression: chi2(3) = 3944.36 Prob > chi2 = 0.0000

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

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 979.7227 7 -1945.445 -1922.116

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

Note: N=207 used in calculating BIC

. estimates store RandWP,

. lrtest RandWP FixWP,

Likelihood-ratio test LR chi2(2) = 2.91

(Assumption: FixWP nested in RandWP) Prob > chi2 = 0.2337

Note: The reported degrees of freedom assumes the null hypothesis is not on the boundary of the parameter space. If this is not true, then the reported test is conservative.

. lincom 1\*WPnm // within-person mood effect

( 1) [lglucAM]WPnm = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0110375 .0041371 2.67 0.008 .0029288 .0191462

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

. lincom 1\*PMnm0 // between-person mood effect

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0802152 .030471 2.63 0.008 .0204931 .1399372

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

. lincom 1\*PMnm0 - 1\*WPnm // contextual mood effect

( 1) - [lglucAM]WPnm + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0691777 .0307464 2.25 0.024 .0089158 .1294395

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

.

. \* STATA Model 2c: SPSS Model 2c: Fixed Effects of Sex (0=M, 1=F) by PMC Negative Mood

. xtmixed lglucAM c.WPnm c.PMnm0 c.sexmf c.WPnmsexmf c.PMnm0sexmf, ///

> || id: , variance ml covariance(un) residuals(independent,t(day)),

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 994.02512

Iteration 1: log likelihood = 994.02512

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(5) = 47.55

Log likelihood = 994.02512 Prob > chi2 = 0.0000

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

WPnm | .0311885 .0059366 5.25 0.000 .0195529 .0428241

PMnm0 | .1996279 .0484871 4.12 0.000 .104595 .2946608

sexmf | -.0361935 .0362613 -1.00 0.318 -.1072643 .0348772

WPnmsexmf | -.0344341 .0077425 -4.45 0.000 -.0496092 -.019259

PMnm0sexmf | -.184933 .0613487 -3.01 0.003 -.3051743 -.0646918

\_cons | 4.953854 .0273373 181.21 0.000 4.900274 5.007434

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .0607399 .0061183 .0498578 .0739972

-----------------------------+------------------------------------------------

var(Residual) | .0300694 .0006781 .0287694 .0314282

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

LR test vs. linear regression: chibar2(01) = 3804.78 Prob >= chibar2 = 0.0000

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 994.0251 8 -1972.05 -1945.388

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

Note: N=207 used in calculating BIC

. predict predsex,

(option xb assumed)

. lincom 1\*\_cons + 0\*sexmf // intercept: men (mood=0)

( 1) [lglucAM]\_cons = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | 4.953854 .0273373 181.21 0.000 4.900274 5.007434

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

. lincom 1\*\_cons + 1\*sexmf // intercept: women (mood=0)

( 1) [lglucAM]sexmf + [lglucAM]\_cons = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | 4.917661 .0238233 206.42 0.000 4.870968 4.964354

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

. lincom 1\*sexmf // intercept: women diff (mood=0)

( 1) [lglucAM]sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0361935 .0362613 -1.00 0.318 -.1072643 .0348772

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

. lincom 1\*WPnm + 0\*WPnmsexmf // within-person mood effect: men

( 1) [lglucAM]WPnm = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0311885 .0059366 5.25 0.000 .0195529 .0428241

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

. lincom 1\*WPnm + 1\*WPnmsexmf // within-person mood effect: women

( 1) [lglucAM]WPnm + [lglucAM]WPnmsexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0032456 .0049702 -0.65 0.514 -.0129871 .0064959

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

. lincom 1\*WPnmsexmf // within-person mood effect: women diff

( 1) [lglucAM]WPnmsexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0344341 .0077425 -4.45 0.000 -.0496092 -.019259

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

. lincom 1\*PMnm0 + 0\*PMnm0sexmf // between-person mood effect: men

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .1996279 .0484871 4.12 0.000 .104595 .2946608

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

. lincom 1\*PMnm0 + 1\*PMnm0sexmf // between-person mood effect: women

( 1) [lglucAM]PMnm0 + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0146949 .0375854 0.39 0.696 -.0589712 .088361

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

. lincom 1\*PMnm0sexmf // between-person mood effect: women diff

( 1) [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.184933 .0613487 -3.01 0.003 -.3051743 -.0646918

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

. lincom 1\*PMnm0 + 0\*PMnm0sexmf - 1\*WPnm + 0\*WPnmsexmf // contextual mood effect: men

( 1) - [lglucAM]WPnm + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .1684394 .0488639 3.45 0.001 .0726679 .2642109

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

. lincom 1\*PMnm0 + 1\*PMnm0sexmf - 1\*WPnm - 1\*WPnmsexmf // contextual mood effect: women

( 1) - [lglucAM]WPnm + [lglucAM]PMnm0 - [lglucAM]WPnmsexmf + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0179405 .0378969 0.47 0.636 -.0563361 .0922171

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

. lincom 1\*PMnm0sexmf -1\*WPnm sexmf // contextual mood effect: women diff

( 1) - [lglucAM]WPnmsexmf + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.1504989 .0618374 -2.43 0.015 -.2716979 -.0293

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

. corr lglucAM predsex

(obs=4140)

| lglucAM predsex

-------------+------------------

lglucAM | 1.0000

predsex | 0.2493 1.0000

.

. \* STATA Model 3: Fixed Effect of TV Negative Mood only using GMC

. xtmixed lglucAM c.TVnm0, || id: , variance ml covariance(un) residuals(independent,t(day)),

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 975.74178

Iteration 1: log likelihood = 975.74178

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(1) = 10.04

Log likelihood = 975.74178 Prob > chi2 = 0.0015

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

TVnm0 | .0120181 .0037921 3.17 0.002 .0045856 .0194505

\_cons | 4.940763 .0180634 273.52 0.000 4.90536 4.976167

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .065954 .0066337 .0541534 .0803259

-----------------------------+------------------------------------------------

var(Residual) | .0302219 .0006815 .0289152 .0315876

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

LR test vs. linear regression: chibar2(01) = 3982.05 Prob >= chibar2 = 0.0000

. estat ic, n(207)

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 975.7418 4 -1943.484 -1930.153

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

Note: N=207 used in calculating BIC

.

. \* STATA Model 3a: Fixed Effects of Negative Mood using GMC

. xtmixed lglucAM c.TVnm0 c.PMnm0, || id: , ///

> variance ml covariance(un) residuals(independent,t(day)),

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 978.269

Iteration 1: log likelihood = 978.269

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(2) = 15.20

Log likelihood = 978.269 Prob > chi2 = 0.0005

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

TVnm0 | .0109743 .0038207 2.87 0.004 .0034859 .0184626

PMnm0 | .0694233 .0306963 2.26 0.024 .0092597 .129587

\_cons | 4.930171 .0184512 267.20 0.000 4.894008 4.966335

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .0643486 .0064737 .0528329 .0783743

-----------------------------+------------------------------------------------

var(Residual) | .0302214 .0006815 .0289147 .031587

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

LR test vs. linear regression: chibar2(01) = 3941.45 Prob >= chibar2 = 0.0000

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 978.269 5 -1946.538 -1929.874

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

Note: N=207 used in calculating BIC

. estimates store FixTV,

. lincom 1\*TVnm0 // within-person mood effect

( 1) [lglucAM]TVnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0109743 .0038207 2.87 0.004 .0034859 .0184626

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

. lincom 1\*TVnm0 + 1\*PMnm0 // between-person mood effect

( 1) [lglucAM]TVnm0 + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0803976 .030461 2.64 0.008 .0206952 .1401

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

. lincom 1\*PMnm0 // contextual mood effect

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0694233 .0306963 2.26 0.024 .0092597 .129587

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

.

. \* STATA Model 3b: Random Effect of WP Negative Mood using GMC

. xtmixed lglucAM c.TVnm0 c.PMnm0, || id: TVnm0, ///

> variance ml covariance(un) residuals(independent,t(day)),

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 979.79325

Iteration 1: log likelihood = 980.19882

Iteration 2: log likelihood = 980.1989

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(2) = 13.72

Log likelihood = 980.1989 Prob > chi2 = 0.0010

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

TVnm0 | .0110189 .0041807 2.64 0.008 .0028248 .019213

PMnm0 | .0701465 .0306592 2.29 0.022 .0100555 .1302374

\_cons | 4.930203 .0184342 267.45 0.000 4.894073 4.966333

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Unstructured |

var(TVnm0) | .0005787 .0003394 .0001833 .0018268

var(\_cons) | .0639986 .0064641 .0525044 .0780092

cov(TVnm0,\_cons) | -.0003279 .0010502 -.0023863 .0017305

-----------------------------+------------------------------------------------

var(Residual) | .0299214 .0006904 .0285984 .0313056

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

LR test vs. linear regression: chi2(3) = 3945.31 Prob > chi2 = 0.0000

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

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 980.1989 7 -1946.398 -1923.069

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

Note: N=207 used in calculating BIC

. estimates store RandTV,

. lrtest RandTV FixTV,

Likelihood-ratio test LR chi2(2) = 3.86

(Assumption: FixTV nested in RandTV) Prob > chi2 = 0.1452

Note: The reported degrees of freedom assumes the null hypothesis is not on the boundary of the parameter space. If this is not true, then the reported test is conservative.

. lincom 1\*TVnm0 // within-person mood effect

( 1) [lglucAM]TVnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0110189 .0041807 2.64 0.008 .0028248 .019213

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

. lincom 1\*TVnm0 + 1\*PMnm0 // between-person mood effect

( 1) [lglucAM]TVnm0 + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0811654 .0304698 2.66 0.008 .0214457 .140885

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

. lincom 1\*PMnm0 // contextual mood effect

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0701465 .0306592 2.29 0.022 .0100555 .1302374

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

.

. \* STATA Model 3c: SPSS Model 2c: Fixed Effects of Sex (0=M, 1=F) by GMC Negative Mood

. xtmixed lglucAM c.TVnm0 c.PMnm0 c.sexmf c.TVnm0sexmf c.PMnm0sexmf, ///

> || id: , variance ml covariance(un) residuals(independent,t(day)),

Note: single-variable random-effects specification; covariance structure set to identity

Note: t() not required for this residual structure; ignored

Performing EM optimization:

Performing gradient-based optimization:

Iteration 0: log likelihood = 994.02512

Iteration 1: log likelihood = 994.02512

Computing standard errors:

Mixed-effects ML regression Number of obs = 4140

Group variable: id Number of groups = 207

Obs per group: min = 20

avg = 20.0

max = 20

Wald chi2(5) = 47.55

Log likelihood = 994.02512 Prob > chi2 = 0.0000

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

TVnm0 | .0311885 .0059366 5.25 0.000 .0195529 .0428241

PMnm0 | .1684394 .0488639 3.45 0.001 .0726679 .2642109

sexmf | -.0361935 .0362613 -1.00 0.318 -.1072643 .0348772

TVnm0sexmf | -.0344341 .0077425 -4.45 0.000 -.0496092 -.019259

PMnm0sexmf | -.1504989 .0618374 -2.43 0.015 -.2716979 -.0293

\_cons | 4.953854 .0273373 181.21 0.000 4.900274 5.007434

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

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

Random-effects Parameters | Estimate Std. Err. [95% Conf. Interval]

-----------------------------+------------------------------------------------

id: Identity |

var(\_cons) | .0607399 .0061183 .0498578 .0739972

-----------------------------+------------------------------------------------

var(Residual) | .0300694 .0006781 .0287694 .0314282

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

LR test vs. linear regression: chibar2(01) = 3804.78 Prob >= chibar2 = 0.0000

. estat ic, n(207),

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

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

. | 207 . 994.0251 8 -1972.05 -1945.388

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

Note: N=207 used in calculating BIC

. lincom 1\*\_cons + 0\*sexmf // intercept: men (mood=0)

( 1) [lglucAM]\_cons = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | 4.953854 .0273373 181.21 0.000 4.900274 5.007434

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

. lincom 1\*\_cons + 1\*sexmf // intercept: women (mood=0)

( 1) [lglucAM]sexmf + [lglucAM]\_cons = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | 4.917661 .0238233 206.42 0.000 4.870968 4.964354

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

. lincom 1\*sexmf // intercept: women diff (mood=0)

( 1) [lglucAM]sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0361935 .0362613 -1.00 0.318 -.1072643 .0348772

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

. lincom 1\*TVnm0 + 0\*TVnm0sexmf // within-person mood effect: men

( 1) [lglucAM]TVnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0311885 .0059366 5.25 0.000 .0195529 .0428241

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

. lincom 1\*TVnm0 + 1\*TVnm0sexmf // within-person mood effect: women

( 1) [lglucAM]TVnm0 + [lglucAM]TVnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0032456 .0049702 -0.65 0.514 -.0129871 .0064959

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

. lincom 1\*TVnm0sexmf // within-person mood effect: women diff

( 1) [lglucAM]TVnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.0344341 .0077425 -4.45 0.000 -.0496092 -.019259

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

. lincom 1\*TVnm0 + 0\*TVnm0sexmf + 1\*PMnm0 + 0\*PMnm0sexmf // between-person mood effect: men

( 1) [lglucAM]TVnm0 + [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .1996279 .0484871 4.12 0.000 .104595 .2946608

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

. lincom 1\*TVnm0 + 1\*TVnm0sexmf + 1\*PMnm0 + 1\*PMnm0sexmf // between-person mood effect: women

( 1) [lglucAM]TVnm0 + [lglucAM]PMnm0 + [lglucAM]TVnm0sexmf + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0146949 .0375854 0.39 0.696 -.0589712 .088361

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

. lincom 1\*TVnm0sexmf + 1\*PMnm0sexmf // between-person mood effect: women diff

( 1) [lglucAM]TVnm0sexmf + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.184933 .0613487 -3.01 0.003 -.3051743 -.0646918

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

. lincom 1\*PMnm0 + 0\*PMnm0sexmf // contextual mood effect: men

( 1) [lglucAM]PMnm0 = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .1684394 .0488639 3.45 0.001 .0726679 .2642109

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

. lincom 1\*PMnm0 + 1\*PMnm0sexmf // contextual mood effect: women

( 1) [lglucAM]PMnm0 + [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | .0179405 .0378969 0.47 0.636 -.0563361 .0922171

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

. lincom 1\*PMnm0sexmf // contextual mood effect: women diff

( 1) [lglucAM]PMnm0sexmf = 0

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

lglucAM | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

(1) | -.1504989 .0618374 -2.43 0.015 -.2716979 -.0293

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end of do-file

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