

```

MIXED ASATISF WITH man woman ASatPrevC PSatPrevC
  /FIXED = man woman ASatPrevC*man ASatPrevC*woman PSatPrevC*man PSatPrevC*woman | NOINT
  /PRINT = SOLUTION TESTCOV
  /RANDOM man woman ASatPrevC*man ASatPrevC*woman PSatPrevC*man PSatPrevC*woman |
        SUBJECT(DYADID) COVTYPE(UN)
  /REPEATED = Personid | SUBJECT(DYADID*day) COVTYPE(CSH) .

```

## LAGGED MODEL - this initial analysis does not converge. The model includes the full set of random effects.

### Warnings

Iteration was terminated but convergence has not been achieved. The MIXED procedure continues despite this warning. Subsequent results produced are based on the last iteration. Validity of the model fit is uncertain.

### Model Dimension<sup>a</sup>

		Covariance Structure	Number of Parameters	Subject Variables	Number of Subjects
Fixed Effects	man		1		
	woman		1		
	man * ASatPrevC		1		
	woman * ASatPrevC		1		
	man * PSatPrevC		1		
	woman * PSatPrevC		1		
Random Effects	man + woman + man * ASatPrevC + woman * ASatPrevC + man * PSatPrevC + woman * PSatPrevC <sup>b</sup>	Unstructured	21	dyadID	
Repeated Effects	PersonID	Heterogeneous Compound ...	3	dyadID * Day	1327
Total			30		

a. Dependent Variable: ASATISF.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	4995.776
Akaike's Information Criterion (AIC)	5043.776
Hurvich and Tsai's Criterion (AICC)	5044.235
Bozdogan's Criterion (CAIC)	5208.870
Schwarz's Bayesian Criterion (BIC)	5184.870

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: ASATISF.

### Fixed Effects

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.
man	6.362156	.042167	48.771	150.878	.000
woman	6.413917	.037483	40.749	171.115	.000
man * ASatPrevC	.277921	.041134	67.663	6.756	.000
woman * ASatPrevC	.244776	.038853	66.683	6.300	.000
man * PSatPrevC	.042733	.037142	37.553	1.151	.257
woman * PSatPrevC	.081866	.043552	55.892	1.880	.065

a. Dependent Variable: ASATISF.

### Covariance Parameters

Estimates of Covariance Parameters<sup>a</sup>

Parameter		Estimate	Std. Error	Wald Z	Sig.
Repeated Measures	Var: [PersonID=1]	.331109	.014286	23.177	.000
	Var: [PersonID=2]	.382436	.016751	22.830	.000
	CSH rho	.379665	.027603	13.755	.000
man + woman + man *	UN (1,1)	.137996	.038078	3.624	.000
ASatPrevC + woman *	UN (2,1)	.073972	.028386	2.606	.009
ASatPrevC + man *	UN (2,2)	.094013	.030121	3.121	.002
PSatPrevC + woman *	UN (3,1)	-.016454	.019716	-.835	.404
PSatPrevC [subject = dyadID]	UN (3,2)	.003536	.017605	.201	.841
	UN (3,3)	.052218	.021690	2.407	.016
	UN (4,1)	-.008857	.018773	-.472	.637
	UN (4,2)	-.041413	.018638	-2.222	.026
	UN (4,3)	-.010737	.014870	-.722	.470
	UN (4,4)	.036679	.016643	2.204	.028
	UN (5,1)	-.008603	.017596	-.489	.625
	UN (5,2)	-.029539	.015696	-1.882	.060
	UN (5,3)	-.009290	.013279	-.700	.484
	UN (5,4)	.027855	.014618	1.906	.057
	UN (5,5)	.035352	.021231	1.665	.096
	UN (6,1)	.016698	.022794	.733	.464
	UN (6,2)	.021471	.027310	.786	.432
	UN (6,3)	.043004	.019683	2.185	.029
	UN (6,4)	-.019801	.015636	-1.266	.205
	UN (6,5)	.003062	.012898	.237	.812
	UN (6,6)	.078166	.031392	2.490	.013

a. Dependent Variable: ASATISF.

```

MIXED ASATISF WITH man woman ASatPrevC PSatPrevC
  /FIXED = man woman ASatPrevC*man ASatPrevC*woman PSatPrevC*man PSatPrevC*woman | NOINT
  /PRINT = SOLUTION TESTCOV
  /RANDOM man woman | SUBJECT(DYADID) COVTYPE(UN)
  /RANDOM ASatPrevC*man ASatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
  /RANDOM PSatPrevC*man PSatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
  /REPEATED = Personid | SUBJECT(DYADID*day) COVTYPE(CSH) .

```

**Mixed Model Analysis - This second lagged model has dramatically simplified random effects but still does not converge .**

### Warnings

Iteration was terminated but convergence has not been achieved. The MIXED procedure continues despite this warning. Subsequent results produced are based on the last iteration. Validity of the model fit is uncertain.

### Model Dimension<sup>a</sup>

		Covariance Structure	Number of Parameters	Subject Variables	Number of Subjects
Fixed Effects	man		1		
	woman		1		
	man * ASatPrevC		1		
	woman * ASatPrevC		1		
	man * PSatPrevC		1		
	woman * PSatPrevC		1		
Random Effects	man + woman <sup>b</sup>	Unstructured	3	dyadID	
	man * ASatPrevC + woman * ASatPrevC <sup>b</sup>	Unstructured	3	dyadID	
	man * PSatPrevC + woman * PSatPrevC <sup>b</sup>	Unstructured	3	dyadID	
Repeated Effects	PersonID	Heterogeneous Compound Symmetry	3	dyadID * Day	1327
Total			18		

a. Dependent Variable: ASATISF.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	5035.964
Akaike's Information Criterion (AIC)	5059.964
Hurvich and Tsai's Criterion (AICC)	5060.083
Bozdogan's Criterion (CAIC)	5142.511
Schwarz's Bayesian Criterion (BIC)	5130.511

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: ASATISF.

### Fixed Effects

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.
man	6.312899	.040783	49.779	154.791	.000
woman	6.386517	.035477	51.253	180.016	.000
man * ASatPrevC	.303529	.036747	121.966	8.260	.000
woman * ASatPrevC	.306425	.034876	139.863	8.786	.000
man * PSatPrevC	.090256	.032259	55.323	2.798	.007
woman * PSatPrevC	.064754	.038645	99.116	1.676	.097

a. Dependent Variable: ASATISF.

### Covariance Parameters

Estimates of Covariance Parameters<sup>a</sup>

Parameter		Estimate	Std. Error	Wald Z	Sig.
Repeated Measures	Var: [PersonID=1]	.354141	.015599	22.703	.000
	Var: [PersonID=2]	.411716	.018027	22.839	.000
	CSH rho	.455173	.023605	19.283	.000
man + woman [subject = dyadID]	UN (1,1)	.130365	.034873	3.738	.000
	UN (2,1)	.071718	.024758	2.897	.004
	UN (2,2)	.081423	.025391	3.207	.001
man * ASatPrevC + woman * ASatPrevC [subject = dyadID]	UN (1,1)	.028471	.011717	2.430	.015
	UN (2,1)	.012135	.008393	1.446	.148
	UN (2,2)	.015287	.008425	1.815	.070
man * PSatPrevC + woman * PSatPrevC [subject = dyadID]	UN (1,1)	.011498	.010707	1.074	.283
	UN (2,1)	.020592	.008169	2.521	.012
	UN (2,2)	.036895	.015250	2.419	.016

a. Dependent Variable: ASATISF.

```
MIXED ASATISF WITH man woman ASatPrevC PSatPrevC
  /FIXED = man woman ASatPrevC*man ASatPrevC*woman PSatPrevC*man PSatPrevC*woman | NOINT
  /PRINT = SOLUTION TESTCOV
  /CRITERIA MXSTEP(20)
  /RANDOM man woman | SUBJECT(DYADID) COVTYPE(UN)
  /RANDOM ASatPrevC*man ASatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
  /RANDOM PSatPrevC*man PSatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
  /REPEATED = Personid | SUBJECT(DYADID*day) COVTYPE(CSH) .
```

**Mixed Model Analysis - Here we raised the MXSTEP to 20 which increases the program's ability to find a solution. We converge and things look good. Note how similar the numbers in this run are to the previous one - changing the MXSTEP to 20 just nudged us enough**

**Model Dimension<sup>a</sup>**

		Covariance Structure	Number of Parameters	Subject Variables	Number of Subjects
Fixed Effects	man		1		
	woman		1		
	man * ASatPrevC		1		
	woman * ASatPrevC		1		
	man * PSatPrevC		1		
	woman * PSatPrevC		1		
Random Effects	man + woman <sup>b</sup>	Unstructured	3	dyadID	
	man * ASatPrevC + woman * ASatPrevC <sup>b</sup>	Unstructured	3	dyadID	
	man * PSatPrevC + woman * PSatPrevC <sup>b</sup>	Unstructured	3	dyadID	
Repeated Effects	PersonID	Heterogeneous Compound Symmetry	3	dyadID * Day	1327
Total			18		

a. Dependent Variable: ASATISF.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5035.958
Akaike's Information Criterion (AIC)	5059.958
Hurvich and Tsai's Criterion (AICC)	5060.076
Bozdogan's Criterion (CAIC)	5142.505
Schwarz's Bayesian Criterion (BIC)	5130.505

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: ASATISF.

**Fixed Effects**

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.
man	6.312897	.040783	49.782	154.791	.000
woman	6.386517	.035477	51.259	180.019	.000
man * ASatPrevC	.303529	.036746	121.980	8.260	.000
woman * ASatPrevC	.306434	.034875	139.880	8.787	.000
man * PSatPrevC	.090251	.032256	55.334	2.798	.007
woman * PSatPrevC	.064734	.038643	99.137	1.675	.097

a. Dependent Variable: ASATISF.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error	Wald Z	Sig.	
Repeated Measures	Var: [PersonID=1]	.354134	.015599	22.703	.000
	Var: [PersonID=2]	.411708	.018026	22.840	.000
	CSH rho	.455147	.023606	19.281	.000
man + woman [subject = dyadID]	UN (1,1)	.130369	.034871	3.739	.000
	UN (2,1)	.071727	.024757	2.897	.004
	UN (2,2)	.081422	.025389	3.207	.001
man * ASatPrevC + woman * ASatPrevC [subject = dyadID]	UN (1,1)	.028469	.011715	2.430	.015
	UN (2,1)	.012137	.008392	1.446	.148
	UN (2,2)	.015287	.008424	1.815	.070
man * PSatPrevC + woman * PSatPrevC [subject = dyadID]	UN (1,1)	.011491	.010703	1.074	.283
	UN (2,1)	.020588	.008167	2.521	.012
	UN (2,2)	.036886	.015247	2.419	.016

a. Dependent Variable: ASATISF.

```
MIXED
ASATISF WITH man woman ASatPrevC PSatPrevC agender
/FIXED = agender ASatPrevC ASatPrevC*agender PSatPrevC PSatPrevC*agender
/PRINT = SOLUTION TESTCOV
/CRITERIA MXSTEP(20)
/RANDOM man woman | SUBJECT(DYADID) COVTYPE(UN)
/RANDOM ASatPrevC*man ASatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
/RANDOM PSatPrevC*man PSatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
/REPEATED = Personid | SUBJECT(DYADID*day) COVTYPE(CSH) .
```

**Mixed Model Analysis - This is the LAGGED model that tests for gender differences . It has the simplified random effects and MXSTEP is 20.**



**Model Dimension<sup>a</sup>**

		Covariance Structure	Number of Parameters	Subject Variables	Number of Subjects
Fixed Effects	Intercept		1		
	AGENDER		1		
	ASatPrevC		1		
	ASatPrevC * AGENDER		1		
	PSatPrevC		1		
	PSatPrevC * AGENDER		1		
Random Effects	man + woman <sup>b</sup>	Unstructured	3	dyadID	
	man * ASatPrevC + woman * ASatPrevC <sup>b</sup>	Unstructured	3	dyadID	
	man * PSatPrevC + woman * PSatPrevC <sup>b</sup>	Unstructured	3	dyadID	
Repeated Effects	PersonID	Heterogeneous Compound ...	3	dyadID * Day	1327
Total			18		

a. Dependent Variable: ASATISF.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5040.117
Akaike's Information Criterion (AIC)	5064.117
Hurvich and Tsai's Criterion (AICC)	5064.235
Bozdogan's Criterion (CAIC)	5146.664
Schwarz's Bayesian Criterion (BIC)	5134.664

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: ASATISF.

**Fixed Effects**

Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.
Intercept	6.349707	.034401	50.274	184.581	.000
AGENDER	-.036810	.016660	51.048	-2.209	.032
ASatPrevC	.304982	.024839	89.006	12.278	.000
ASatPrevC * AGENDER	-.001452	.025813	288.866	-.056	.955
PSatPrevC	.077492	.025591	65.736	3.028	.004
PSatPrevC * AGENDER	.012759	.024738	249.423	.516	.606

a. Dependent Variable: ASATISF.

## Covariance Parameters

Estimates of Covariance Parameters<sup>a</sup>

Parameter		Estimate	Std. Error	Wald Z	Sig.
Repeated Measures	Var: [PersonID=1]	.354134	.015599	22.703	.000
	Var: [PersonID=2]	.411708	.018026	22.840	.000
	CSH rho	.455147	.023606	19.281	.000
man + woman [subject = dyadID]	UN (1,1)	.130369	.034871	3.739	.000
	UN (2,1)	.071727	.024757	2.897	.004
	UN (2,2)	.081422	.025389	3.207	.001
man * ASatPrevC + woman * ASatPrevC [subject = dyadID]	UN (1,1)	.028469	.011715	2.430	.015
	UN (2,1)	.012137	.008392	1.446	.148
	UN (2,2)	.015287	.008424	1.815	.070
man * PSatPrevC + woman * PSatPrevC [subject = dyadID]	UN (1,1)	.011491	.010703	1.074	.283
	UN (2,1)	.020588	.008167	2.521	.012
	UN (2,2)	.036886	.015247	2.419	.016

a. Dependent Variable: ASATISF.

**Mixed Model Analysis - This is our final model that allows men and women to have different intercepts but they have the same actor and partner effects.**

MIXED

```
ASATISF WITH man woman ASatPrevC PSatPrevC agender
/FIXED = man woman ASatPrevC PSatPrevC | NOINT
/PRINT = SOLUTION TESTCOV
/CRITERIA MXSTEP(20)
/RANDOM man woman | SUBJECT(DYADID) COVTYPE(UN)
/RANDOM ASatPrevC*man ASatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
/RANDOM PSatPrevC*man PSatPrevC*woman | SUBJECT(DYADID) COVTYPE(UN)
/REPEATED = Personid | SUBJECT(DYADID*day) COVTYPE(CSH) .
```

## Mixed Model Analysis

**Model Dimension<sup>a</sup>**

		Covariance Structure	Number of Parameters	Subject Variables	Number of Subjects
Fixed Effects	man		1		
	woman		1		
	ASatPrevC		1		
	PSatPrevC		1		
Random Effects	man + woman <sup>b</sup>	Unstructured	3	dyadID	
	man * ASatPrevC + woman * ASatPrevC <sup>b</sup>	Unstructured	3	dyadID	
	man * PSatPrevC + woman * PSatPrevC <sup>b</sup>	Unstructured	3	dyadID	
Repeated Effects	PersonID	Heterogeneous Compound Symmetry	3	dyadID * Day	1327
Total			16		

a. Dependent Variable: ASATISF.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5028.260
Akaike's Information Criterion (AIC)	5052.260
Hurvich and Tsai's Criterion (AICC)	5052.379
Bozdogan's Criterion (CAIC)	5134.816
Schwarz's Bayesian Criterion (BIC)	5122.816

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: ASATISF.

**Fixed Effects**

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.
man	6.313975	.041033	56.407	153.874	.000
woman	6.386623	.034600	56.740	184.584	.000
ASatPrevC	.304280	.024670	88.870	12.334	.000
PSatPrevC	.082648	.024810	55.026	3.331	.002

a. Dependent Variable: ASATISF.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter		Estimate	Std. Error	Wald Z	Sig.
Repeated Measures	Var: [PersonID=1]	.353352	.015319	23.067	.000
	Var: [PersonID=2]	.412168	.017890	23.039	.000
	CSH rho	.466680	.022893	20.385	.000
man + woman [subject = dyadID]	UN (1,1)	.133509	.033139	4.029	.000
	UN (2,1)	.070814	.024001	2.951	.003
	UN (2,2)	.076811	.023012	3.338	.001
man * ASatPrevC + woman * ASatPrevC [subject = dyadID]	UN (1,1)	.028340	.011518	2.461	.014
	UN (2,1)	.012951	.008179	1.583	.113
	UN (2,2)	.014917	.008174	1.825	.068
man * PSatPrevC + woman * PSatPrevC [subject = dyadID]	UN (1,1)	.011632	.010160	1.145	.252
	UN (2,1)	.020460	.007991	2.560	.010
	UN (2,2)	.035987	.014430	2.494	.013

a. Dependent Variable: ASATISF.