

Obs	ID	Sex	Group	Days	Fatmass	FFM	MuscleGlycogen	COXIV	GIRperkgFFMperinsulin
1	1	1	1	0	43.1473	73.1527	517.538	1.37	2.6919
2	1	1	1	93	44.4567	72.8433	623.147	1.49	6.7656
3	1	1	1	96	44.4567	72.8433	726.587	1.88	6.1666
4	4	0	0	0	39.6760	51.3240	506.638	0.86	5.1617
5	4	0	0	93	38.2872	52.0128	766.439	1.12	6.2406
6	4	0	0	96	38.2448	51.9552	628.304	1.00	4.8547
7	6	1	0	0	49.7871	67.9129	519.121	1.05	4.6351
8	6	1	0	93	48.5135	68.3865	553.229	1.47	4.6936
9	6	1	0	96	49.7170	70.0830	832.371	1.58	4.4599
10	7	0	0	0	44.8836	54.4164	585.228	1.22	13.7358

Obs	TotalAdiponectin	LogTotalAdiponectin
1	2472.66	3.39316
2	1157.65	3.06358
3	1173.18	3.06936
4	1369.91	3.13669
5	1017.86	3.00769
6	1105.87	3.04371
7	1354.38	3.13174
8	795.24	2.90050
9	909.14	2.95863
10	11574.23	4.06349

Obs	ID	Sex	Group	Days	Fatmass	FFM	MuscleGlycogen	COXIV	GlRperkgFFMperinsulin	TotalAdiponectin
1	1	1	1	0	43.1473	73.1527	517.538	1.37	2.6919	2472.66
2	1	1	1	93	44.4567	72.8433	623.147	1.49	6.7656	1157.65
3	1	1	1	96	44.4567	72.8433	726.587	1.88	6.1666	1173.18
4	4	0	0	0	39.6760	51.3240	506.638	0.86	5.1617	1369.91
5	4	0	0	93	38.2872	52.0128	766.439	1.12	6.2406	1017.86
6	4	0	0	96	38.2448	51.9552	628.304	1.00	4.8547	1105.87
7	6	1	0	0	49.7871	67.9129	519.121	1.05	4.6351	1354.38
8	6	1	0	93	48.5135	68.3865	553.229	1.47	4.6936	795.24
9	6	1	0	96	49.7170	70.0830	832.371	1.58	4.4599	909.14
10	7	0	0	0	44.8836	54.4164	585.228	1.22	13.7358	11574.23

Obs	LogTotalAdiponectin	Fatmass_cent	Adiponectin_cent	MuscleGlycogen_cent
1	3.39316	2.4673	-1537.73	-77.868
2	3.06358	3.7767	-2852.75	27.741
3	3.06936	3.7767	-2837.22	131.181
4	3.13669	-1.0040	-2640.48	-88.768
5	3.00769	-2.3928	-2992.53	171.033
6	3.04371	-2.4352	-2904.52	32.898
7	3.13174	9.1071	-2656.01	-76.285
8	2.90050	7.8335	-3215.16	-42.176
9	2.95863	9.0370	-3101.26	236.965
10	4.06349	4.2036	7563.84	-10.177

## The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structure	Unstructured
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
ID	31	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 66 7 8 9
Group	2	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	9
Columns in X	6
Columns in Z per Subject	2
Subjects	31
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	92
Number of Observations Not Used	1

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	498.14861226	
1	2	453.22767188	89.98405764
2	3	453.04963672	0.50636106
3	1	452.89560424	0.00415448
4	1	452.64750295	.
5	1	452.64738007	0.00030261
6	3	452.64186188	0.00096480

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	2	452.56065545	.
8	1	452.56018229	0.00488559
9	3	452.55999988	.
10	1	452.55943208	.
11	1	452.55943199	.
12	0	452.55943199	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	4.0943	3.5986	-0.3164
2	3.5986	8.8108	1.7765
3	-0.3164	1.7765	3.8773

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.5991	-0.07940
2	0.5991	1.0000	0.3039
3	-0.07940	0.3039	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	7.0119	0.005638
2	Days	1	0.005638	

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	
2	Days	1		1.0000

**The Mixed Procedure**

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.1062	11.1348	7.2367
2	11.1348	16.8713	9.8539
3	7.2367	9.8539	11.9717

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8134	0.6276
2	0.8134	1.0000	0.6934
3	0.6276	0.6934	1.0000

**Estimated G matrix is not positive definite.**

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	7.0119
UN(2,1)	ID	0.005638
UN(2,2)	ID	0
UN(1,1)	ID	4.0943
UN(2,1)	ID	3.5986
UN(2,2)	ID	8.8108
UN(3,1)	ID	-0.3164
UN(3,2)	ID	1.7765
UN(3,3)	ID	3.8773

Fit Statistics	
-2 Res Log Likelihood	452.6
AIC (Smaller is Better)	468.6
AICC (Smaller is Better)	470.4
BIC (Smaller is Better)	480.0

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
7	45.59	<.0001

## The Mixed Procedure

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	-2.3715	6.9957	28	-0.34	0.7371
Sex		1	-4.6346	6.5653	28	-0.71	0.4861
Days*Group	0		0.01366	0.005984	28	2.28	0.0302
Days*Group	1		0.01733	0.006139	28	2.82	0.0087
Fatmass_cent			-0.09327	0.07872	28	-1.18	0.2461
LogTotalAdiponectin			2.9335	1.8990	28	1.54	0.1336

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	28	2.36	0.1127
Days*Group	2	28	6.04	0.0066
Fatmass_cent	1	28	1.40	0.2461
LogTotalAdiponectin	1	28	2.39	0.1336

## The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Autoregressive
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
ID	31	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 66 7 8 9
Group	2	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	7
Columns in X	6
Columns in Z per Subject	2
Subjects	31
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	92
Number of Observations Not Used	1

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	498.14861226	
1	4	454.67229843	1.04359330
2	1	454.49209961	0.00220955
3	4	454.28130901	0.00064185
4	1	454.18018891	0.00006847
5	1	454.16967111	0.00000403
6	1	454.16906510	0.00000001

## The Mixed Procedure

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	5.6035	5.3576	2.9412
2	5.3576	12.2907	6.7474
3	2.9412	6.7474	8.8880

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6456	0.4168
2	0.6456	1.0000	0.6456
3	0.4168	0.6456	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	4.8199	-0.00599
2	Days	1	-0.00599	

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	
2	Days	1		1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	10.4234	9.6206	7.1863
2	9.6206	15.9969	10.4356
3	7.1863	10.4356	12.5582

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7450	0.6281
2	0.7450	1.0000	0.7363
3	0.6281	0.7363	1.0000

Estimated G matrix is not positive definite.



## The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	4.8199
UN(2,1)	ID	-0.00599
UN(2,2)	ID	0
Var(1)	ID	5.6035
Var(2)	ID	12.2907
Var(3)	ID	8.8880
ARH(1)	ID	0.6456

Fit Statistics	
-2 Res Log Likelihood	454.2
AIC (Smaller is Better)	466.2
AICC (Smaller is Better)	467.2
BIC (Smaller is Better)	474.8

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
5	43.98	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	-2.7166	7.1139	28	-0.38	0.7054
Sex		1	-4.9157	6.6781	28	-0.74	0.4678
Days*Group	0		0.01301	0.006684	28	1.95	0.0618
Days*Group	1		0.01628	0.006787	28	2.40	0.0233
Fatmass_cent			-0.1069	0.07964	28	-1.34	0.1904
LogTotalAdiponectin			3.0606	1.9300	28	1.59	0.1240

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	28	2.29	0.1198
Days*Group	2	28	4.37	0.0223
Fatmass_cent	1	28	1.80	0.1904
LogTotalAdiponectin	1	28	2.51	0.1240

## rand unstrucutred, main ARH(1), without random slope

## The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Autoregressive
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
ID	31	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 66 7 8 9
Group	2	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	5
Columns in X	6
Columns in Z per Subject	1
Subjects	31
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	92
Number of Observations Not Used	1

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	498.14861226	
1	2	454.70539113	0.00290089
2	1	454.23454670	0.00016342
3	1	454.20634670	0.00001633
4	1	454.20375873	0.00000022
5	1	454.20372548	0.00000000

rand unstrucured, main ARH(1), without random slope

### The Mixed Procedure

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	5.9323	5.3472	2.8211
2	5.3472	11.9983	6.3303
3	2.8211	6.3303	8.3140

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6338	0.4017
2	0.6338	1.0000	0.6338
3	0.4017	0.6338	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	4.4460

Estimated G Correlation Matrix			
Row	Effect	ID	Col1
1	Intercept	1	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	10.3783	9.7932	7.2672
2	9.7932	16.4444	10.7763
3	7.2672	10.7763	12.7601

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7496	0.6315
2	0.7496	1.0000	0.7439
3	0.6315	0.7439	1.0000

rand unstrucutred, main ARH(1), without random slope

### The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	4.4460
Var(1)	ID	5.9323
Var(2)	ID	11.9983
Var(3)	ID	8.3140
ARH(1)	ID	0.6338

Fit Statistics	
-2 Res Log Likelihood	454.2
AIC (Smaller is Better)	464.2
AICC (Smaller is Better)	465.0
BIC (Smaller is Better)	471.4

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	43.94	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	-2.5765	7.1196	57	-0.36	0.7188
Sex		1	-4.8268	6.6834	57	-0.72	0.4731
Days*Group	0		0.01302	0.006723	57	1.94	0.0577
Days*Group	1		0.01616	0.006822	57	2.37	0.0213
Fatmass_cent			-0.1058	0.07953	57	-1.33	0.1885
LogTotalAdiponectin			3.0222	1.9318	57	1.56	0.1233

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	57	2.36	0.1035
Days*Group	2	57	4.31	0.0181
Fatmass_cent	1	57	1.77	0.1885
LogTotalAdiponectin	1	57	2.45	0.1233

## The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Ante-dependence
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
ID	31	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 66 7 8 9
Group	2	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	8
Columns in X	6
Columns in Z per Subject	2
Subjects	31
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	92
Number of Observations Not Used	1

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	498.14861226	
1	2	453.60166457	8666.7446566
2	1	453.57591080	28.08164197
3	2	453.50995163	23.01559417
4	1	453.44510547	21.63697003
5	1	453.14727871	36.28605650
6	1	452.72359951	2020.5614763

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	1	452.64930264	7.58843808
8	1	452.56882501	66.32784491
9	1	452.55949698	2.03955817
10	1	452.55943200	0.00007034
11	1	452.55943199	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	4.1663	4.9384	1.0643
2	4.9384	9.0137	1.9427
3	1.0643	1.9427	4.0044

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8059	0.2606
2	0.8059	1.0000	0.3234
3	0.2606	0.3234	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	6.9399	-0.00800
2	Days	1	-0.00800	0.000278

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	-0.1820
2	Days	1	-0.1820	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.1062	11.1348	7.2367
2	11.1348	16.8713	9.8539
3	7.2367	9.8539	11.9717

## The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8134	0.6276
2	0.8134	1.0000	0.6934
3	0.6276	0.6934	1.0000

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	6.9399
UN(2,1)	ID	-0.00800
UN(2,2)	ID	0.000278
Var(1)	ID	4.1663
Var(2)	ID	9.0137
Var(3)	ID	4.0044
Rho(1)	ID	0.8059
Rho(2)	ID	0.3234

Fit Statistics	
-2 Res Log Likelihood	452.6
AIC (Smaller is Better)	468.6
AICC (Smaller is Better)	470.4
BIC (Smaller is Better)	480.0

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
7	45.59	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	-2.3715	6.9957	28	-0.34	0.7371
Sex		1	-4.6346	6.5653	28	-0.71	0.4861
Days*Group	0		0.01366	0.005984	28	2.28	0.0302
Days*Group	1		0.01733	0.006139	28	2.82	0.0087
Fatmass_cent			-0.09327	0.07872	28	-1.18	0.2461
LogTotalAdiponectin			2.9335	1.8990	28	1.54	0.1336

**The Mixed Procedure**

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	28	2.36	0.1127
Days*Group	2	28	6.04	0.0066
Fatmass_cent	1	28	1.40	0.2461
LogTotalAdiponectin	1	28	2.39	0.1336



## The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Compound Symmetry
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
ID	31	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 66 7 8 9
Group	2	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	7
Columns in X	6
Columns in Z per Subject	2
Subjects	31
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	92
Number of Observations Not Used	1

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	498.14861226	
1	2	524.05470021	3.37103308
2	1	524.00488368	3.26279544
3	1	523.50844539	8.18462520
4	1	519.41137597	165726.17830
5	1	515.40266853	1016909.9660
6	1	511.55133513	367066.23406

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	1	508.30655521	1919157.7752
8	2	504.21597194	453367.75539
9	3	494.35176020	.
10	1	494.30091185	68217394.956
11	1	494.29952232	16549659.993
12	1	494.26016982	5446217.0021
13	1	494.13883103	1697463.5170
14	3	493.33055899	.
15	3	493.33047131	1880297.5501
16	1	491.84690776	145189.91866
17	1	491.05636011	4320.9392585
18	3	477.45548088	0.19929718
19	1	464.13523677	.
20	1	456.65117944	.
21	1	456.26104708	71.83458583
22	1	456.22759171	0.00996485
23	1	456.22730188	0.00000056
24	1	456.22730186	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1			
2		6.0941	2.3113
3		2.3113	7.6754

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000		
2		1.0000	0.3379
3		0.3379	1.0000

## The Mixed Procedure

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	11.0442	-0.01859
2	Days	1	-0.01859	0.000013

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	-1.0000
2	Days	1	-1.0000	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.0442	9.3153	9.2595
2	9.3153	13.7945	9.9596
3	9.2595	9.9596	15.2717

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7547	0.7130
2	0.7547	1.0000	0.6862
3	0.7130	0.6862	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	11.0442
UN(2,1)	ID	-0.01859
UN(2,2)	ID	0.000013
Var(1)	ID	0
Var(2)	ID	6.0941
Var(3)	ID	7.6754
CSH	ID	0.3379

## The Mixed Procedure

Fit Statistics	
-2 Res Log Likelihood	456.2
AIC (Smaller is Better)	468.2
AICC (Smaller is Better)	469.3
BIC (Smaller is Better)	476.8

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
5	41.92	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	-0.5790	7.3001	28	-0.08	0.9373
Sex		1	-2.6385	6.8607	28	-0.38	0.7034
Days*Group	0		0.01244	0.005965	28	2.09	0.0463
Days*Group	1		0.01536	0.006128	28	2.51	0.0183
Fatmass_cent			-0.1340	0.08364	28	-1.60	0.1204
LogTotalAdiponectin			2.5475	1.9755	28	1.29	0.2078

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	28	1.49	0.2423
Days*Group	2	28	4.80	0.0161
Fatmass_cent	1	28	2.57	0.1204
LogTotalAdiponectin	1	28	1.66	0.2078