

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	30	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 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	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	504.61293029	
1	2	450.18239544	1628.4957026
2	1	450.17815483	1.57348369
3	1	450.17138665	0.45230856
4	1	450.16939194	0.11843612
5	1	450.16687273	0.00075767
6	1	450.15281902	0.17961106

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	1	450.13777630	0.97971058
8	1	450.13538268	0.00010716
9	1	450.13535326	0.00000086
10	1	450.13535325	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	3.0309	2.9228	-0.08697
2	2.9228	8.2268	2.0756
3	-0.08697	2.0756	3.5261

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.5853	-0.02660
2	0.5853	1.0000	0.3854
3	-0.02660	0.3854	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	9.1003	-0.00260
2	Days	1	-0.00260	0.000058

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	-0.1134
2	Days	1	-0.1134	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.1312	11.7812	8.7636
2	11.7812	17.3434	11.2006
3	8.7636	11.2006	12.6599

## The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8122	0.7072
2	0.8122	1.0000	0.7559
3	0.7072	0.7559	1.0000

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	9.1003
UN(2,1)	ID	-0.00260
UN(2,2)	ID	0.000058
UN(1,1)	ID	3.0309
UN(2,1)	ID	2.9228
UN(2,2)	ID	8.2268
UN(3,1)	ID	-0.08697
UN(3,2)	ID	2.0756
UN(3,3)	ID	3.5261

Fit Statistics	
-2 Res Log Likelihood	450.1
AIC (Smaller is Better)	468.1
AICC (Smaller is Better)	470.6
BIC (Smaller is Better)	480.7

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
8	54.48	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	8.3341	0.7963	27	10.47	<.0001
Sex		1	5.4223	0.9633	27	5.63	<.0001
Days*Group	0		0.01595	0.006144	27	2.60	0.0151
Days*Group	1		0.01952	0.006408	27	3.05	0.0051

## The Mixed Procedure

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Fatmass_cent			-0.1333	0.08013	27	-1.66	0.1076
MuscleGlycogen_cent			-0.00393	0.001651	27	-2.38	0.0247

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	27	71.95	<.0001
Days*Group	2	27	7.17	0.0032
Fatmass_cent	1	27	2.77	0.1076
MuscleGlycogen_cent	1	27	5.66	0.0247

## 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	30	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 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	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	504.61293029	
1	3	452.38465253	1428.7679123
2	1	452.33916906	17.12881357
3	1	452.13388199	146.07338764
4	1	451.93674954	0.01197062
5	2	451.27647656	0.00479913
6	3	450.72828765	.

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	2	450.55357393	0.00023812
8	1	450.51375676	0.00003867
9	1	450.50746919	0.00000129
10	1	450.50727305	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	5.0417	4.9071	2.5491
2	4.9071	11.3953	5.9197
3	2.5491	5.9197	7.3372

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6474	0.4191
2	0.6474	1.0000	0.6474
3	0.4191	0.6474	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	6.8274	-0.00709
2	Days	1	-0.00709	

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	11.8691	11.0752	8.6960
2	11.0752	16.9043	11.4073
3	8.6960	11.4073	12.8036



## The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7819	0.7054
2	0.7819	1.0000	0.7754
3	0.7054	0.7754	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	6.8274
UN(2,1)	ID	-0.00709
UN(2,2)	ID	0
Var(1)	ID	5.0417
Var(2)	ID	11.3953
Var(3)	ID	7.3372
ARH(1)	ID	0.6474

Fit Statistics	
-2 Res Log Likelihood	450.5
AIC (Smaller is Better)	462.5
AICC (Smaller is Better)	463.6
BIC (Smaller is Better)	470.9

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
5	54.11	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	8.3527	0.7995	27	10.45	<.0001
Sex		1	5.4546	0.9658	27	5.65	<.0001
Days*Group	0		0.01600	0.006500	27	2.46	0.0205
Days*Group	1		0.01982	0.006754	27	2.93	0.0068
Fatmass_cent			-0.1403	0.08059	27	-1.74	0.0932
MuscleGlycogen_cent			-0.00429	0.001643	27	-2.61	0.0144

## The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	27	71.46	<.0001
Days*Group	2	27	6.53	0.0049
Fatmass_cent	1	27	3.03	0.0932
MuscleGlycogen_cent	1	27	6.83	0.0144

## rand unstrcutred, 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	30	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 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	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	504.61293029	
1	3	451.15469811	0.00260219
2	1	450.69008209	0.00071256
3	1	450.57040829	0.00016094
4	1	450.54367716	0.00000938
5	1	450.54222647	0.00000005
6	1	450.54221890	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	5.3104	4.6589	2.2371
2	4.6589	10.6838	5.1300
3	2.2371	5.1300	6.4387

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6185	0.3826
2	0.6185	1.0000	0.6185
3	0.3826	0.6185	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	6.5071

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

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.8175	11.1660	8.7442
2	11.1660	17.1909	11.6371
3	8.7442	11.6371	12.9458

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7834	0.7070
2	0.7834	1.0000	0.7801
3	0.7070	0.7801	1.0000

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

### The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	6.5071
Var(1)	ID	5.3104
Var(2)	ID	10.6838
Var(3)	ID	6.4387
ARH(1)	ID	0.6185

Fit Statistics	
-2 Res Log Likelihood	450.5
AIC (Smaller is Better)	460.5
AICC (Smaller is Better)	461.3
BIC (Smaller is Better)	467.5

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	54.07	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr >  t
Sex		0	8.3530	0.7977	55	10.47	<.0001
Sex		1	5.4398	0.9640	55	5.64	<.0001
Days*Group	0		0.01603	0.006535	55	2.45	0.0174
Days*Group	1		0.01976	0.006783	55	2.91	0.0052
Fatmass_cent			-0.1389	0.08053	55	-1.72	0.0902
MuscleGlycogen_cent			-0.00429	0.001640	55	-2.62	0.0115

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	55	71.94	<.0001
Days*Group	2	55	6.47	0.0030
Fatmass_cent	1	55	2.97	0.0902
MuscleGlycogen_cent	1	55	6.85	0.0115

## 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	30	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 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	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	504.61293029	
1	2	451.11724169	159232.83035
2	1	450.93823684	0.01472940
3	1	450.55229933	0.00484466
4	4	450.19295105	3906.3317183
5	1	450.18309789	6.87024699
6	1	450.17953333	0.11400088

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	1	450.16738661	0.06783123
8	1	450.15237835	1.74849787
9	1	450.14604674	0.04844561
10	1	450.13644672	0.42027199
11	1	450.13535665	0.01662228
12	1	450.13535325	0.00000018
13	0	450.13535325	0.00000018
14	0	450.13535325	0.00000018
15	0	450.13535325	0.00000018
16	0	450.13535325	0.00000018
17	0	450.13535325	0.00000018
18	0	450.13535325	0.00000018
19	0	450.13535325	0.00000018
20	0	450.13535325	0.00000018
21	0	450.13535325	0.00000018

WARNING: Did not converge.

Covariance Parameter Values At Last Iteration		
Cov Parm	Subject	Estimate
UN(1,1)	ID	8.3662
UN(2,1)	ID	-0.00329
UN(2,2)	ID	0.000223
Var(1)	ID	3.7650
Var(2)	ID	7.6639
Var(3)	ID	2.8740
Rho(1)	ID	0.6927
Rho(2)	ID	0.3130

## 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	30	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 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	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	504.61293029	
1	2	514.90620136	68.16841095
2	1	514.84406432	3.55006014
3	1	514.21566588	12.89225080
4	1	509.93198497	551168.59851
5	1	505.78176029	189081.09304
6	1	504.15831361	5162913.0054



## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	3	492.17200840	.
8	3	490.70834298	.
9	2	483.33176466	.
10	1	482.55618145	45454.041303
11	1	481.07936395	412.00561680
12	1	479.92477371	271.08511646
13	1	479.35349430	213.04346702
14	1	479.01689333	355.69508135
15	1	478.80899994	480.13782713
16	1	478.44402782	549.16944773
17	1	477.96463263	619.07411367
18	1	477.27049668	679.68843178
19	1	476.22549534	728.95336578
20	1	474.61484566	770.68439473
21	1	474.01577115	715.80064313
22	1	473.19682719	634.47324697
23	1	472.09331059	536.04709010
24	1	470.62318273	432.16674538
25	1	468.67249711	334.09809728
26	1	466.05924226	250.06289496
27	1	462.43648038	184.39799959
28	1	457.02474232	0.26624577
29	1	452.69347785	0.00040405
30	1	452.62845117	0.44396299
31	1	452.62754904	0.00231516
32	2	452.62754700	0.00000002
33	1	452.62754233	0.00000004
34	3	452.62753990	0.00000002
35	1	452.62753555	0.00000003
36	1	452.62752977	0.00000004
37	2	452.62752579	0.00000003
38	1	452.62751924	0.00000004
39	1	452.62751153	0.00000004
40	1	452.62750343	0.00000005
41	1	452.62749290	0.00000006

## The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
42	1	452.62748884	0.00000012
43	1	452.62746848	0.00000032
44	6	452.62745922	0.00000008
45	1	452.62744390	0.00000009
46	1	452.62742409	0.00000012
47	2	452.62741225	0.00000020
48	1	452.62737599	0.00000052

WARNING: Did not converge.

Covariance Parameter Values At Last Iteration		
Cov Parm	Subject	Estimate
UN(1,1)	ID	12.1086
UN(2,1)	ID	-0.02167
UN(2,2)	ID	0.000113
Var(1)	ID	0.006159
Var(2)	ID	5.5532
Var(3)	ID	5.8464
CSH	ID	0.3331