

Obs	ID	Sex	Group	Days	Fatmass	MuscleGlycogen	GlRperkgFFMperinsulin
1	1	M	HIIT	0	43.1473	517.538	2.6919
2	1	M	HIIT	90	44.4567	623.147	6.7656
3	1	M	HIIT	93	44.4567	726.587	6.1666
4	4	F	MICT	0	39.6760	506.638	5.1617
5	4	F	MICT	90	38.2872	766.439	6.2406
6	4	F	MICT	93	38.2448	628.304	4.8547
7	6	M	MICT	0	49.7871	519.121	4.6351
8	6	M	MICT	90	48.5135	553.229	4.6936
9	6	M	MICT	93	49.7170	832.371	4.4599
10	7	F	MICT	0	44.8836	585.228	13.7358

Obs	ID	Sex	Group	Days	Fatmass	MuscleGlycogen	GIRperkgFFMperinsulin	Fatmass_cent	MuscleGlycogen_cent
1	1	M	HIIT	0	43.1473	517.538	2.6919	2.4673	-77.868
2	1	M	HIIT	90	44.4567	623.147	6.7656	3.7767	27.741
3	1	M	HIIT	93	44.4567	726.587	6.1666	3.7767	131.181
4	4	F	MICT	0	39.6760	506.638	5.1617	-1.0040	-88.768
5	4	F	MICT	90	38.2872	766.439	6.2406	-2.3928	171.033
6	4	F	MICT	93	38.2448	628.304	4.8547	-2.4352	32.898
7	6	M	MICT	0	49.7871	519.121	4.6351	9.1071	-76.285
8	6	M	MICT	90	48.5135	553.229	4.6936	7.8335	-42.176
9	6	M	MICT	93	49.7170	832.371	4.4599	9.0370	236.965
10	7	F	MICT	0	44.8836	585.228	13.7358	4.2036	-10.177

evaluating need for random slope
unstructured
did not converge

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	16
Columns in X	13
Columns in Z per Subject	4
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	478.37905891	

WARNING: Stopped because of infinite likelihood.

The Mixed Procedure

Covariance Parameter Values At Last Iteration		
Cov Parm	Subject	Estimate
UN(1,1)	ID	9.3014
UN(2,1)	ID	0
UN(2,2)	ID	8.3157
UN(3,1)	ID	0
UN(3,2)	ID	2.0854
UN(3,3)	ID	3.5933
UN(4,1)	ID	0
UN(4,2)	ID	2.9119
UN(4,3)	ID	0
UN(4,4)	ID	3.3095
UN(1,1)	ID	5.25E-8
UN(2,1)	ID	0
UN(2,2)	ID	5.25E-8
UN(3,1)	ID	0
UN(3,2)	ID	0
UN(3,3)	ID	5.25E-8

**evaluating need for random slope
AR(1)
random slope and random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	14
Columns in X	13
Columns in Z per Subject	4
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	478.37905891	
1	2	466.30884395	2.48824473
2	1	454.49922549	6.38378829
3	1	443.22987716	12.06799167
4	1	436.28608914	15.23899581

**evaluating need for random slope
AR(1)
random slope and random intercept**

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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	432.75445890	12.81010160
6	1	430.98853168	8.60242873
7	1	427.29703914	11.10878769
8	1	423.65454516	0.41085432
9	2	423.41985963	0.00087846
10	2	423.40988800	0.00000015
11	1	423.40984659	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.4082	11.6564	12.2473
2	11.6564	11.5077	11.7946
3	12.2473	11.7946	12.3925

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.9755	0.9877
2	0.9755	1.0000	0.9877
3	0.9877	0.9877	1.0000

Estimated G Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		4.5589	-2.8709	-3.1277	-3.4863
2	Days	1	90	-2.8709	7.4191	1.5181	2.4015
3	Days	1	93	-3.1277	1.5181	2.7963	-0.9664
4	Days	1	0	-3.4863	2.4015	-0.9664	2.3048

**evaluating need for random slope
AR(1)
random slope and random intercept**

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The Mixed Procedure

Estimated G Correlation Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		1.0000	-0.4936	-0.8760	-1.0000
2	Days	1	90	-0.4936	1.0000	0.3333	0.5807
3	Days	1	93	-0.8760	0.3333	1.0000	-0.3807
4	Days	1	0	-1.0000	0.5807	-0.3807	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2992	12.2596	9.2258
2	12.2596	17.7439	11.8729
3	9.2258	11.8729	13.4923

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8299	0.7162
2	0.8299	1.0000	0.7673
3	0.7162	0.7673	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	4.5589
UN(2,1)	ID	-2.8709
UN(2,2)	ID	7.4191
UN(3,1)	ID	-3.1277
UN(3,2)	ID	1.5181
UN(3,3)	ID	2.7963
UN(4,1)	ID	-3.4863
UN(4,2)	ID	2.4015
UN(4,3)	ID	-0.9664
UN(4,4)	ID	2.3048
Var(1)	ID	11.5077
Var(2)	ID	12.3925

evaluating need for random slope
AR(1)
random slope and random intercept

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The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
Var(3)	ID	12.4082
ARH(1)	ID	0.9877

Fit Statistics	
-2 Res Log Likelihood	423.4
AIC (Smaller is Better)	451.4
AICC (Smaller is Better)	457.9
BIC (Smaller is Better)	471.0

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
13	54.97	<.0001

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Sex		F		8.2982	1.1000	0	7.54	.
Sex		M		5.2972	1.2348	0	4.29	.
Days			90	1.6389	0.6302	53	2.60	0.0120
Days			93	1.1010	0.7928	53	1.39	0.1707
Days			0	0
Group*Days	HIIT		90	1.3904	1.5771	0	0.88	.
Group*Days	HIIT		93	0.5446	1.3922	0	0.39	.
Group*Days	HIIT		0	0.9457	1.3128	0	0.72	.
Group*Days	MICT		90	0
Group*Days	MICT		93	0
Group*Days	MICT		0	0
Fatmass_cent				-0.1235	0.08294	0	-1.49	.
MuscleGlycogen_cent				-0.00180	0.001988	0	-0.91	.

**evaluating need for random slope
AR(1)
random slope and random intercept**

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The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	0	5.45	.
Days	2	53	8.87	0.0005
Group*Days	3	0	0.33	.
Fatmass_cent	1	0	2.22	.
MuscleGlycogen_cent	1	0	0.82	.

**evaluating need for random slope
ARH(1)
only random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	5
Columns in X	13
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	478.37905891	
1	2	582.48908596	0.27920337
2	1	503.11157907	0.18122883
3	1	461.11834942	0.10390645
4	1	440.04916791	0.05083433

**evaluating need for random slope
ARH(1)
only random intercept**

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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	430.57249454	0.01976433
6	1	427.10125730	0.00531804
7	1	426.21059142	0.00105130
8	1	426.03332345	0.00021883
9	1	425.99830235	0.00001750
10	1	425.99572141	0.00000015
11	1	425.99570033	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	2.8686	0.4248	-0.9259
2	0.4248	3.6007	-1.0373
3	-0.9259	-1.0373	2.2607

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.1322	-0.3636
2	0.1322	1.0000	-0.3636
3	-0.3636	-0.3636	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	11.2284

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

**evaluating need for random slope
ARH(1)
only random intercept**

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The Mixed Procedure

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	14.0970	11.6533	10.3026
2	11.6533	14.8291	10.1911
3	10.3026	10.1911	13.4892

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8060	0.7471
2	0.8060	1.0000	0.7206
3	0.7471	0.7206	1.0000

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	11.2284
Var(1)	ID	3.6007
Var(2)	ID	2.2607
Var(3)	ID	2.8686
ARH(1)	ID	-0.3636

Fit Statistics	
-2 Res Log Likelihood	426.0
AIC (Smaller is Better)	436.0
AICC (Smaller is Better)	436.8
BIC (Smaller is Better)	443.0

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	52.38	<.0001

**evaluating need for random slope
ARH(1)
only random intercept**

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The Mixed Procedure

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Sex		F		8.1779	1.1644	53	7.02	<.0001
Sex		M		5.6011	1.3156	53	4.26	<.0001
Days			90	1.6229	0.6358	53	2.55	0.0136
Days			93	1.1452	0.7781	53	1.47	0.1470
Days			0	0
Group*Days	HIIT		90	1.2344	1.4499	53	0.85	0.3984
Group*Days	HIIT		93	0.4466	1.3948	53	0.32	0.7501
Group*Days	HIIT		0	0.8118	1.4040	53	0.58	0.5656
Group*Days	MICT		90	0
Group*Days	MICT		93	0
Group*Days	MICT		0	0
Fatmass_cent				-0.1518	0.08696	53	-1.75	0.0866
MuscleGlycogen_cent				-0.00216	0.002020	53	-1.07	0.2902

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	3.66	0.0611
Days	2	53	8.37	0.0007
Group*Days	3	53	0.31	0.8202
Fatmass_cent	1	53	3.05	0.0866
MuscleGlycogen_cent	1	53	1.14	0.2902

**evaluating need for random slope
ANTE(1)
random slope and random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	15
Columns in X	13
Columns in Z per Subject	4
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	478.37905891	
1	2	463.48801710	1.64324440
2	1	450.66916970	4.04140978
3	1	441.89118221	6.41580669
4	1	436.47304739	7.62561463

**evaluating need for random slope
ANTE(1)
random slope and random intercept**

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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	433.19951797	7.10985653
6	1	432.01154948	6.44359195
7	1	431.31681377	5.85822507
8	1	430.81420379	5.27905687
9	1	430.51505746	4.87484042
10	1	430.35088577	4.63504672
11	1	430.26452177	4.50406717
12	1	430.22015309	4.43554664
13	1	430.19765460	4.40058203
14	1	430.18632461	4.38390964
15	1	430.18084515	4.42995261
16	1	430.17976348	4.45769567
17	3	426.85365982	0.21651229
18	2	425.06942668	2.32293347
19	1	423.68952466	0.13666153
20	1	423.41726016	0.00013299
21	1	423.40986484	0.00000032
22	1	423.40984659	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.3318	7.8274	8.7976
2	7.8274	11.5967	10.5242
3	8.7976	10.5242	11.8286

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6828	0.7599
2	0.6828	1.0000	0.8986
3	0.7599	0.8986	1.0000

**evaluating need for random slope
ANTE(1)
random slope and random intercept**

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The Mixed Procedure

Estimated G Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		5.2323	-2.7240	-2.8264	-2.5877
2	Days	1	90	-2.7240	6.3630	1.6669	4.5117
3	Days	1	93	-2.8264	1.6669	2.0843	0.6101
4	Days	1	0	-2.5877	4.5117	0.6101	0.9107

Estimated G Correlation Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		1.0000	-0.4721	-0.8559	-1.0000
2	Days	1	90	-0.4721	1.0000	0.4577	1.0000
3	Days	1	93	-0.8559	0.4577	1.0000	0.4428
4	Days	1	0	-1.0000	1.0000	0.4428	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2993	12.2596	9.2258
2	12.2596	17.7440	11.8730
3	9.2258	11.8730	13.4924

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8299	0.7162
2	0.8299	1.0000	0.7673
3	0.7162	0.7673	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	5.2323
UN(2,1)	ID	-2.7240
UN(2,2)	ID	6.3630
UN(3,1)	ID	-2.8264
UN(3,2)	ID	1.6669
UN(3,3)	ID	2.0843

**evaluating need for random slope
ANTE(1)
random slope and random intercept**

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The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(4,1)	ID	-2.5877
UN(4,2)	ID	4.5117
UN(4,3)	ID	0.6101
UN(4,4)	ID	0.9107
Var(1)	ID	11.5967
Var(2)	ID	11.8286
Var(3)	ID	11.3318
Rho(1)	ID	0.8986
Rho(2)	ID	0.7599

Fit Statistics	
-2 Res Log Likelihood	423.4
AIC (Smaller is Better)	453.4
AICC (Smaller is Better)	460.9
BIC (Smaller is Better)	474.4

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
14	54.97	<.0001

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Sex		F		8.2982	1.1000	0	7.54	.
Sex		M		5.2972	1.2348	0	4.29	.
Days			90	1.6389	0.6302	53	2.60	0.0120
Days			93	1.1010	0.7928	53	1.39	0.1707
Days			0	0
Group*Days	HIIT		90	1.3904	1.5771	0	0.88	.
Group*Days	HIIT		93	0.5446	1.3922	0	0.39	.
Group*Days	HIIT		0	0.9457	1.3128	0	0.72	.
Group*Days	MICT		90	0
Group*Days	MICT		93	0

evaluating need for random slope
ANTE(1)
random slope and random intercept

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The Mixed Procedure

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Group*Days	MICT		0	0
Fatmass_cent				-0.1235	0.08294	0	-1.49	.
MuscleGlycogen_cent				-0.00180	0.001988	0	-0.91	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	0	5.45	.
Days	2	53	8.87	0.0005
Group*Days	3	0	0.33	.
Fatmass_cent	1	0	2.22	.
MuscleGlycogen_cent	1	0	0.82	.

**evaluating need for random slope
ANTE(1)
only random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	6
Columns in X	13
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	478.37905891	
1	2	473.55631403	0.17980665
2	1	471.58519019	0.17377530
3	1	470.62046325	0.17086072
4	1	470.14356051	0.16942653

**evaluating need for random slope
ANTE(1)
only random intercept**

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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	469.90649827	0.16871497
6	1	469.78831701	0.16836080
7	1	469.75880770	0.16827234
8	1	469.71457224	0.16814055
9	1	469.69246721	0.16803141
10	1	469.68970240	0.16809455
11	1	469.68003969	0.16804146
12	1	469.67520674	0.17159387
13	1	469.67293988	0.15920479
14	1	469.67220713	0.19537630
15	1	469.67212866	0.14937300
16	1	469.67177711	0.14125233
17	1	469.66991444	0.13011925
18	1	469.66869784	69.46126882
19	1	469.66762832	0.12929369
20	1	469.66681993	69.45454263
21	1	469.66681270	69.45733371

WARNING: Stopped because of infinite likelihood.

Covariance Parameter Values At Last Iteration		
Cov Parm	Subject	Estimate
UN(1,1)	ID	12.0031
Var(1)	ID	5.4192
Var(2)	ID	0.7079
Var(3)	ID	0.3955
Rho(1)	ID	-0.3983
Rho(2)	ID	-1.0000

**evaluating need for random slope
CSH
random slope and random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	14
Columns in X	13
Columns in Z per Subject	4
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	478.37905891	
1	2	453.10320401	6.60273051
2	1	440.77546802	9.40181051
3	1	434.31548711	7.99696081
4	1	430.35777773	4.04762661

**evaluating need for random slope
CSH
random slope and random intercept**

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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	2	425.46569665	0.15164222
6	1	423.44656745	0.11854135
7	1	423.41008917	0.00013984
8	1	423.40984662	0.00000001

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.8576	9.1220	9.3417
2	9.1220	11.4235	9.1691
3	9.3417	9.1691	11.9802

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7838	0.7838
2	0.7838	1.0000	0.7838
3	0.7838	0.7838	1.0000

Estimated G Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		5.1663	-2.5906	-2.6760	-3.0036
2	Days	1	90	-2.5906	6.3346	2.8037	3.5651
3	Days	1	93	-2.6760	2.8037	1.6975	0.3972
4	Days	1	0	-3.0036	3.5651	0.3972	1.2824

Estimated G Correlation Matrix							
Row	Effect	ID	Days	Col1	Col2	Col3	Col4
1	Intercept	1		1.0000	-0.4528	-0.9036	-1.0000
2	Days	1	90	-0.4528	1.0000	0.8550	1.0000
3	Days	1	93	-0.9036	0.8550	1.0000	0.2692
4	Days	1	0	-1.0000	1.0000	0.2692	1.0000

**evaluating need for random slope
CSH
random slope and random intercept**

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The Mixed Procedure

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2990	12.2592	9.2255
2	12.2592	17.7432	11.8724
3	9.2255	11.8724	13.4920

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8299	0.7162
2	0.8299	1.0000	0.7673
3	0.7162	0.7673	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	5.1663
UN(2,1)	ID	-2.5906
UN(2,2)	ID	6.3346
UN(3,1)	ID	-2.6760
UN(3,2)	ID	2.8037
UN(3,3)	ID	1.6975
UN(4,1)	ID	-3.0036
UN(4,2)	ID	3.5651
UN(4,3)	ID	0.3972
UN(4,4)	ID	1.2824
Var(1)	ID	11.4235
Var(2)	ID	11.9802
Var(3)	ID	11.8576
CSH	ID	0.7838

Fit Statistics	
-2 Res Log Likelihood	423.4
AIC (Smaller is Better)	451.4
AICC (Smaller is Better)	457.9
BIC (Smaller is Better)	471.0

**evaluating need for random slope
CSH
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The Mixed Procedure

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
13	54.97	<.0001

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Sex		F		8.2982	1.1000	0	7.54	.
Sex		M		5.2972	1.2348	0	4.29	.
Days			90	1.6389	0.6302	53	2.60	0.0120
Days			93	1.1010	0.7928	53	1.39	0.1707
Days			0	0
Group*Days	HIIT		90	1.3904	1.5771	0	0.88	.
Group*Days	HIIT		93	0.5446	1.3922	0	0.39	.
Group*Days	HIIT		0	0.9457	1.3128	0	0.72	.
Group*Days	MICT		90	0
Group*Days	MICT		93	0
Group*Days	MICT		0	0
Fatmass_cent				-0.1235	0.08294	0	-1.49	.
MuscleGlycogen_cent				-0.00180	0.001988	0	-0.91	.

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	0	5.45	.
Days	2	53	8.87	0.0005
Group*Days	3	0	0.33	.
Fatmass_cent	1	0	2.22	.
MuscleGlycogen_cent	1	0	0.82	.

**evaluating need for random slope
CSH
only random intercept**

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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	HIIT MICT
Sex	2	F M
Days	3	90 93 0

Dimensions	
Covariance Parameters	5
Columns in X	13
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	478.37905891	
1	2	431.16081594	0.02237492
2	1	427.32700904	0.00417549
3	1	426.65916521	0.00035690
4	1	426.59530242	0.00083113

evaluating need for random slope
CSH
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The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	4	426.56690787	0.00035316
6	1	426.50502731	0.00034825
7	1	426.43977333	0.00026652
8	1	426.40324398	0.00024743
9	1	426.35974060	0.00034263
10	3	426.33905186	0.00040623
11	2	426.25496492	0.00396464
12	4	426.19476680	0.00132033
13	3	425.90819472	.
14	1	425.57331460	0.00004437
15	1	425.56702831	0.00000004
16	1	425.56702334	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2942	11.0875	9.9272
2	11.0875	17.0028	11.6745
3	9.9272	11.6745	13.6304

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7669	0.7669
2	0.7669	1.0000	0.7669
3	0.7669	0.7669	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	

**evaluating need for random slope
CSH
only random intercept**

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The Mixed Procedure

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

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2942	11.0875	9.9272
2	11.0875	17.0028	11.6745
3	9.9272	11.6745	13.6304

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7669	0.7669
2	0.7669	1.0000	0.7669
3	0.7669	0.7669	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	0
Var(1)	ID	17.0028
Var(2)	ID	13.6304
Var(3)	ID	12.2942
CSH	ID	0.7669

Fit Statistics	
-2 Res Log Likelihood	425.6
AIC (Smaller is Better)	433.6
AICC (Smaller is Better)	434.1
BIC (Smaller is Better)	439.2

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
3	52.81	<.0001

evaluating need for random slope
CSH
only random intercept

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The Mixed Procedure

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > t
Sex		F		8.2448	1.1060	53	7.45	<.0001
Sex		M		5.3643	1.2504	53	4.29	<.0001
Days			90	1.6259	0.7152	53	2.27	0.0271
Days			93	1.2138	0.7338	53	1.65	0.1040
Days			0	0
Group*Days	HIIT		90	1.3506	1.5482	53	0.87	0.3869
Group*Days	HIIT		93	0.5255	1.3998	53	0.38	0.7089
Group*Days	HIIT		0	0.8443	1.3144	53	0.64	0.5234
Group*Days	MICT		90	0
Group*Days	MICT		93	0
Group*Days	MICT		0	0
Fatmass_cent				-0.1492	0.08557	53	-1.74	0.0871
MuscleGlycogen_cent				-0.00258	0.001999	53	-1.29	0.2029

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	4.75	0.0338
Days	2	53	6.99	0.0020
Group*Days	3	53	0.34	0.7980
Fatmass_cent	1	53	3.04	0.0871
MuscleGlycogen_cent	1	53	1.66	0.2029