

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	109.8890563	0.0000000
1	2	49.77495605	0.0000000

Convergence criteria met.

R Matrix for CHLD 1

Row	COL1	COL2	COL3	COL4
1	4.11293713	3.05123784	3.9496302	3.96885394
2	3.05123784	3.28942952	3.66315270	3.70795453
3	3.9496302	3.66315270	5.09663099	4.97878418
4	3.96885394	3.70795453	4.97878418	5.40763522

R Correlation Matrix for CHLD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.822954459	0.86265673	0.84156059
2	0.822954459	1.00000000	0.89464994	0.87916505
3	0.86265673	0.89464994	1.00000000	0.94837045
4	0.84156059	0.87916505	0.94837045	1.00000000

Covariance Parameter Estimates (MLE)

Cov Param	Subject	Estimate
UN(1,1)	CHLD	4.11293713
UN(2,1)	CHLD	3.05123784
UN(2,2)	CHLD	3.28942952
UN(3,1)	CHLD	3.94962302
UN(3,2)	CHLD	3.66315270
UN(3,3)	CHLD	5.09663099
UN(4,1)	CHLD	3.96885394
UN(4,2)	CHLD	3.70795453
UN(4,3)	CHLD	4.97878418
UN(4,4)	CHLD	5.40763522

FIT WITH UNSTRUCTURED COVARIANCE FOR EACH GENDER

----- GENDER=0 -----

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Model Fitting Information for DISTANCE

Description	Value
Observations	44,0000
Log Likelihood	-65.3208
Kalke's Information Criterion	-75.3208
Schwarz's Bayesian Criterion	-84.2417
-2 Log Likelihood	130.6415
Null Model LRT Chi-Square	60.1141
Null Model LRT DF	9,0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	17.42198920	0.69301655	10	25.14	0.0001
AGE	0.48232133	0.06144496	10	7.85	0.0001

Tests of Fixed Effects

Source	NDP	DDF	Type III F	Pr > F
AGE	1	10	61.62	0.0001

FIT WITH UNSTRUCTURED COVARIANCE FOR EACH GENDER

----- GENDER=1 -----

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The MIXED Procedure

Class Level Information

Class	Levels	Values
CHLD	16	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	169.56401242	0.0000565
1	2	146.75420757	0.0000000
2	1	146.75379968	0.0000000

Convergence criteria met.

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R Matrix for CHLD 12

Row	COL1	COL2	COL3	COL4
1	5.78131351	2.01517295	3.35848760	1.49866431
2	2.01517295	4.40352247	2.09820229	2.64720382
3	3.35848760	2.09820229	6.60643723	3.04212858
4	1.49866431	2.64720382	3.04212858	4.07826136

R Correlation Matrix for CHLD 12

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.39939163	0.54343403	0.30864097
2	0.39939163	1.00000000	0.38901253	0.62466870
3	0.54343403	0.38901253	1.00000000	0.58607930
4	0.30864097	0.62466870	0.58607930	1.00000000

Covariance Parameter Estimates (MLE)

Cov Param	Subject	Estimate
UN(1,1)	CHLD	5.78131351
UN(2,1)	CHLD	2.01517295
UN(2,2)	CHLD	4.40352247
UN(3,1)	CHLD	3.35848760
UN(3,2)	CHLD	2.09820229
UN(3,3)	CHLD	6.60643723
UN(4,1)	CHLD	1.49866431
UN(4,2)	CHLD	2.64720382
UN(4,3)	CHLD	3.04212858

FIT WITH UNSTRUCTURED COVARIANCE FOR EACH GENDER

----- GENDER=1 -----

Covariance Parameter Estimates (MLE)

Cov Param	Subject	Estimate
UN(4,4)	CHLD	4.07826136

Model Fitting Information for DISTANCE

Description	Value
Observations	64.0000
Log Likelihood	-132.189

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Maik'e's Information Criterion -142.189
 Schwarz's Bayesian Criterion -152.983
 -2 Log Likelihood 264.3779
 Null Model LRT Chi-Square 22.8102
 Null Model LRT DF 9.0000
 Null Model LRT P-Value 0.0066

Solution for Fixed Effects

Effect	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	15.82823385	1.11788416	15	14.16	0.0001
AGE	0.83395547	0.09274362	15	8.99	0.0001

Tests of Fixed Effects

Source	NDP	DDF	Type III	F	Pr > F
AGE	1	15	80.86	0.0001	

COMMON COMPOUND SYMMETRY STRUCTURE

The MIXED Procedure
 Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHLD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	
1	1	230.14833485	0.00000000

Convergence criteria met.

R Matrix for CHLD 1

Row	COL1	COL2	COL3	COL4
1	4.90518935	3.03056169	3.03056169	3.03056169
2	3.03056169	4.90518935	3.03056169	3.03056169

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3 3.03056169 3.03056169 4.90515835 3.03056169
4 3.03056169 3.03056169 3.03056169 4.90515835

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.61783157	0.61783157	0.61783157
2	0.61783157	1.00000000	0.61783157	0.61783157
3	0.61783157	0.61783157	1.00000000	0.61783157
4	0.61783157	0.61783157	0.61783157	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Estimate
CS	CHILD	3.03056169
Residual		1.87459666

Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Log Likelihood	-214.320

COMMON COMPOUND SYMMETRY STRUCTURE

Description	Value
Akaike's Information Criterion	-216.320
Schwarz's Bayesian Criterion	-219.002
-2 Log Likelihood	428.6391
Null Model LRT Chi-Square	49.6027
Null Model LRT DF	1.0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	Estimate	Std Error	DF	t	Pr > |t|
GENDER 0	17.37272727	1.16152410	25	14.96	0.0001
GENDER 1	16.34062500	0.96308491	25	16.97	0.0001
AGE*GENDER 0	0.47954545	0.09230869	79	5.20	0.0001
AGE*GENDER 1	0.78437500	0.07653822	79	10.25	0.0001

Tests of Fixed Effects

Source	NDP	DF	Type III F	Pr > F
GENDER	2	25	255.79	0.0001
AGE*GENDER	2	79	66.01	0.0001

COMMON COMPOUND SYMMETRY STRUCTURE

The MIXED Procedure

Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHILD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	0.00000000
1	1	230.14833485	0.00000000

Convergence criteria met.

R Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	4.90515835	3.03056169	3.03056169	3.03056169
2	3.03056169	4.90515835	3.03056169	3.03056169
3	3.03056169	3.03056169	4.90515835	3.03056169
4	3.03056169	3.03056169	3.03056169	4.90515835

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.61783157	0.61783157	0.61783157
2	0.61783157	1.00000000	0.61783157	0.61783157
3	0.61783157	0.61783157	1.00000000	0.61783157
4	0.61783157	0.61783157	0.61783157	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Estimate
CS	CH1D	3.03056169
Residual		1.87459686

Model Fitting Information for DISTANCE

Description	Value
Observations	108,0000
Log Likelihood	-214.320

COMMON COMPOUND SYMMETRY STRUCTURE

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Model Fitting Information for DISTANCE

Description	Value
Akaike's Information Criterion	-216.320
Schwarz's Bayesian Criterion	-219.002
-2 Log Likelihood	428.6391
Null Model LRT Chi-Square	49.6027
Null Model LRT DF	1,0000
Null Model LRT P-Value	0,0000

Solution for Fixed Effects

Effect	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	16.34062500	0.96308491	25	16.97	0.0001
GENDER	1.03210227	1.50886407	25	0.68	0.5003
GENDER	0.00000000	.	.	.	.
AGE	0.78437500	0.07653832	79	10.25	0.0001
AGE*GENDER	-0.30482955	0.11991250	79	-2.54	0.0130
AGE*GENDER	0.00000000	.	.	.	.

Tests of Fixed Effects

Source	NDF	DDF	Type III ChSq	Type III F	Pr > ChSq	Pr > F
GENDER	1	25	0.47	0.47	0.4940	0.5003
AGE	1	79	111.10	111.10	0.0001	0.0001
AGE*GENDER	1	79	6.46	6.46	0.0110	0.0130

COMMON AR(1) STRUCTURE

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The MIXED Procedure

Class Level Information

Class	Levels Values
GENDER	2 0 1
CH1D	27 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	
1	2	242.19028305	0.00000000

Convergence criteria met.

R Matrix for CH1D 1

Row	COL1	COL2	COL3	COL4
1	4.89099772	2.9695214	1.80295318	1.09465671
2	2.9695214	4.89099772	2.9695214	1.80295318
3	1.80295318	2.9695214	4.89099772	2.9695214
4	1.09465671	1.80295318	2.9695214	4.89099772

R Correlation Matrix for CH1D 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.60714650	0.36862687	0.22381051
2	0.60714650	1.00000000	0.60714650	0.36862687
3	0.36862687	0.60714650	1.00000000	0.60714650
4	0.22381051	0.36862687	0.60714650	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Estimate
AR(1)	CH1D	0.60714650
Residual		4.89099772

Model Fitting Information for DISTANCE

Description	Value
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Observations 108.0000
Log Likelihood -220.341

COMMON AR(1) STRUCTURE

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Model Fitting Information for DISTANCE

Description Value
Akaike's Information Criterion -222.341
Schwarz's Bayesian Criterion -225.023
-2 Log Likelihood 440.6810
Null Model LRT Chi-Square 37.5608
Null Model LRT DF 1.0000
Null Model LRT P-Value 0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	0	16.59200843	1.32993505	25	12.48	0.0001
GENDER	0	0.72970938	2.08360778	25	0.35	0.7291
AGE	1	0.00000000	.	.	.	.
AGE	0	0.76957127	0.11471734	79	6.71	0.0001
AGE*GENDER	0	-0.28583891	0.17972753	79	-1.59	0.1157
AGE*GENDER	1	0.00000000	.	.	.	.

Tests of Fixed Effects

Source	NDF	DDF	Type III	ChiSq	Type III F	Pr > ChiSq	Pr > F
GENDER	1	25	0.12	0.12	0.7262	0.7291	
AGE	1	79	48.63	48.63	0.0001	0.0001	
AGE*GENDER	1	79	2.53	2.53	0.1117	0.1157	

COMMON ONE-DEPENDENT STRUCTURE

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The MIXED Procedure

Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHIID	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

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24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.7510369	0.16283093
1	2	390.54531458	0.15138564
2	1	347.18308127	0.12467398
3	1	311.69987055	0.08645876
4	1	285.81117034	0.04649605
5	1	269.65390998	0.01592441
6	1	261.71448323	0.00714984
7	1	259.23322543	0.00004120
8	1	258.93128241	0.00000002
9	1	258.92588076	0.00000000
10	1	258.92587880	0.00000000

Convergence criteria met.

R Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	4.52935016	1.61197764	1.61197764	1.61197764
2	1.61197764	4.52935016	4.52935016	1.61197764
3	1.61197764	1.61197764	4.52935016	4.52935016
4	1.61197764	1.61197764	1.61197764	4.52935016

R Correlation Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.35589601	0.35589601	0.35589601
2	0.35589601	1.00000000	1.00000000	0.35589601
3	0.35589601	0.35589601	1.00000000	1.00000000
4	0.35589601	0.35589601	1.00000000	1.00000000

Covariance Parameter Estimates (MIE)

Cov Parm	Subject	Estimate
TOEP(2)	CHIID	1.61197764

COMMON ONE-DEPENDENT STRUCTURE

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Covariance Parameter Estimates (MIE)

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Cov Param Subject Estimate
Residual 4.52935016

Model Fitting Information for DISTANCE

Description Value
Observations 108.0000
Log Likelihood -228.708
Akaike's Information Criterion -230.708
Schwarz's Bayesian Criterion -233.390
-2 Log Likelihood 457.4166
Null Model LRT Chi-Square 20.8252
Null Model LRT DF 1.0000
Null Model LRT P-Value 0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT		16.62079354	1.41665505	25	11.73	0.0001
GENDER	0	0.68267027	2.21947191	25	0.31	0.7609
GENDER	1	0.00000000	.	.	.	.
AGE		0.76290241	0.12534533	79	6.09	0.0001
AGE*GENDER 0		-0.27728390	0.19637840	79	-1.41	0.1619
AGE*GENDER 1		0.00000000	.	.	.	.

Tests of Fixed Effects

Source	NDF	DF	Type III ChiSq	Type III F	Pr > ChiSq	Pr > F
GENDER	1	25	0.09	0.09	0.7584	0.7609
AGE	1	79	40.42	40.42	0.0001	0.0001
AGE*GENDER	1	79	1.99	1.99	0.1580	0.1619

SEPARATE COMPOUND SYMMETRY FOR EACH GENDER

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The MIXED Procedure

Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHIID	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

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ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	
1	1	210.3224911	0.00000000

Convergence criteria met.

R Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	4.47040289	3.88038912	3.88038912	3.88038912
2	3.88038912	4.47040289	3.88038912	3.88038912
3	3.88038912	3.88038912	4.47040289	3.88038912
4	3.88038912	3.88038912	3.88038912	4.47040289

R Correlation Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.86801776	0.86801776	0.86801776
2	0.86801776	1.00000000	0.86801776	0.86801776
3	0.86801776	0.86801776	1.00000000	0.86801776
4	0.86801776	0.86801776	0.86801776	1.00000000

Covariance Parameter Estimates (MIE)

Cov Parm	Subject Group	Estimate
Variance	CHIID GENDER 0	0.59001377
	CHIID GENDER 1	3.88038912
	CS CHIID GENDER 1	2.75774740
	CS CHIID GENDER 1	2.44630534

SEPARATE COMPOUND SYMMETRY FOR EACH GENDER

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Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Log Likelihood	-204.406
Akaike's Information Criterion	-208.406
Schwarz's Bayesian Criterion	-213.771
-2 Log Likelihood	408.8130

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Null Model LRT Chi-Square 69.4288
 Null Model LRT DF 3.0000
 Null Model LRT P-Value 0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	0	16.34062500	1.11239466	25	14.68	0.0001
GENDER	0	1.03210227	1.38904167	25	0.74	0.4644
GENDER	1	0.00000000	.	.	.	.
AGE	0	0.78437500	0.09283297	79	8.45	0.0001
AGE*GENDER	0	-0.30482955	0.10630071	79	-2.87	0.0053
AGE*GENDER	1	0.00000000	.	.	.	.

Tests of Fixed Effects

Source	NDP	DDF	Type III ChSq	Type III F	Pr > ChSq	Pr > F
GENDER	1	25	0.55	0.55	0.4575	0.4644
AGE	1	79	141.37	141.37	0.0001	0.0001
AGE*GENDER	1	79	8.22	8.22	0.0041	0.0053

SEPARATE AR(1) FOR EACH GENDER

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The MIXED Procedure

Class Level Information

Class	Levels Values
GENDER	2 0 1
CHIID	27 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	0.20025573
1	2	277.22895748	0.08967756
2	1	241.89741713	0.04134123
3	1	228.20853174	0.02792114
4	1	221.89625631	0.00923733
5	2	218.1864240	0.00083428
6	1	217.01493469	0.00000671
7	1	216.91941814	0.00000000
8	1	216.91868629	0.00000000

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Convergence criteria met.

R Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	4.65912515	4.17303063	3.73765120	3.34769564
2	4.17303063	4.65912515	4.17303063	3.73765120
3	3.73765120	4.17303063	4.65912515	4.17303063
4	3.34769564	3.73765120	4.17303063	4.65912515

R Correlation Matrix for CHIID 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.89566829	0.80222168	0.71852452
2	0.89566829	1.00000000	0.89566829	0.80222168
3	0.80222168	0.89566829	1.00000000	0.89566829
4	0.71852452	0.80222168	0.89566829	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject Group	Estimate
Variance	CHIID GENDER 0	4.65912515
	CHIID GENDER 0	0.89566829
Variance	CHIID GENDER 1	5.17239664

SEPARATE AR(1) FOR EACH GENDER

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Covariance Parameter Estimates (MLE)

Cov Parm	Subject Group	Estimate
AR(1)	CHIID GENDER 1	0.44296724

Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Log Likelihood	-207.705
Kaizer's Information Criterion	-211.705
Schwarz's Bayesian Criterion	-217.069
-2 Log Likelihood	415.4094
Null Model LRT Chi-Square	62.8324
Null Model LRT DF	3.0000

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Null Model LRT P-Value 0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > t
INTERCEPT		16.52448088	1.45582763	25	11.35	0.0001
GENDER	0	0.78170066	1.81228895	25	0.43	0.6699
GENDER	1	0.00000000				
AGE		0.77291428	0.12758526	79	6.06	0.0001
AGE*GENDER	0	-0.28815707	0.1513187	79	-1.90	0.0605
AGE*GENDER	1	0.00000000				

Tests of Fixed Effects

Source	NDF	DDF	Type III ChSq	Type III F	Pr > ChSq	Pr > F
GENDER	1	25	0.19	0.19	0.662	0.6699
AGE	1	79	69.07	69.07	0.0001	0.0001
AGE*GENDER	1	79	3.63	3.63	0.0569	0.0605

SEPARATE ONE-DEPENDENT FOR EACH GENDER 20

The MIXED Procedure

Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHILD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	
1	2	266.51421764	280.11418099
2	1	260.39366601	49.8538575
3	2	255.12623493	7.3333163
4	1	246.65953438	0.00347991
5	1	246.17171571	0.00028171
6	1	246.13450679	0.00000436
7	1	246.13396451	0.00000000

Convergence criteria met.

R Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	3.70925596	2.04150452		
2	2.04150452	3.70925596	2.04150452	
3	2.04150452	2.04150452	3.70925596	2.04150452
4		2.04150452	3.70925596	

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.55038114		
2	0.55038114	1.00000000	0.55038114	
3	0.55038114	0.55038114	1.00000000	0.55038114
4		0.55038114	0.55038114	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Group	Estimate
Variance	CHILD	GENDER 0	3.70925596
TOEP(2)	CHILD	GENDER 0	2.04150452
Variance	CHILD	GENDER 1	4.98905143
TOEP(2)	CHILD	GENDER 1	1.32893583

SEPARATE ONE-DEPENDENT FOR EACH GENDER 21

Model Fitting Information for DISTANCE

Description	Value
Observations	108,0000
Log Likelihood	-222.312
Kaizer's Information Criterion	-226.312
Schwarz's Bayesian Criterion	-231.677
-2 Log Likelihood	444.6247
Null Model LRT Chi-Square	33.6171
Null Model LRT DF	3,0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT		16.50908057	1.47270003	25	11.16	0.0001
GENDER	0	0.58323970	2.10255563	25	0.29	0.7744

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GENDER 1 0.00000000
AGE 0 0.77199813 0.13117418
AGE*GENDER 0 -0.26725335 0.17716278 79 -1.51 0.1354
AGE*GENDER 1 0.00000000

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Tests of Fixed Effects

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Source NDF DDF Type III ChSq Type III F Pr > ChSq Pr > F
GENDER 1 25 0.08 0.08 0.7720 0.7744
AGE 1 79 51.92 51.92 0.0001 0.0001
AGE*GENDER 1 79 2.28 2.28 0.1314 0.1354

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FULL MODEL WITH COMPOUND SYMMETRY FOR EACH GENDER

The MIXED Procedure

Class Level Information

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Class Levels Values
GENDER 2 0 1
CHILD 27 1 2 3 4 5 6 7 8 9 10 11 12 13
      14 15 16 17 18 19 20 21 22 23
      24 25 26 27

```

ML Estimation Iteration History

```

Iteration Evaluations Objective Criterion
0 1 279.7510369 0.00000000
1 1 210.32224911 0.00000000

```

Convergence criteria met.

R Matrix for CHILD 1

```

Row COL1 COL2 COL3 COL4
1 4.47040289 3.88038912 3.88038912 3.88038912
2 3.88038912 4.47040289 3.88038912 3.88038912
3 3.88038912 3.88038912 4.47040289 3.88038912
4 3.88038912 3.88038912 3.88038912 4.47040289

```

R Correlation Matrix for CHILD 1

```

Row COL1 COL2 COL3 COL4

```

```

1 1.00000000 0.86801776 0.86801776 0.86801776
2 0.86801776 1.00000000 0.86801776 0.86801776
3 0.86801776 0.86801776 1.00000000 0.86801776
4 0.86801776 0.86801776 0.86801776 1.00000000

```

Covariance Parameter Estimates (MLE)

```

Cov Parm Subject Group Estimate
Variance CHILD GENDER 0 0.59001377
CS CHILD GENDER 0 3.88038912
Variance CHILD GENDER 1 2.75774740
CS CHILD GENDER 1 2.44630534

```

FULL MODEL WITH COMPOUND SYMMETRY FOR EACH GENDER

Model Fitting Information for DISTANCE

```

Description Value
Observations 108.0000
Log Likelihood -204.406
Kalke's Information Criterion -208.406
Schwarz's Bayesian Criterion -213.771
-2 Log Likelihood 408.8130
Null Model LRT Chi-Square 69.4288
Null Model LRT DF 3.0000
Null Model LRT P-Value 0.0000

```

Solution for Fixed Effects

```

Effect GENDER Estimate Std Error DF t Pr > |t|
GENDER 0 17.37272727 0.83107137 25 20.90 0.0001
GENDER 1 16.34062500 1.11299466 25 14.68 0.0001
AGE*GENDER 0 -0.47954545 0.05178688 79 9.26 0.0001
AGE*GENDER 1 0.79437500 0.09283297 79 8.45 0.0001

```

Covariance Matrix for Fixed Effects

```

Effect GENDER Row COL1 COL2 COL3 COL4
GENDER 0 1 0.69067963 0.00000000 -0.02950069 0.00000000
GENDER 1 2 0.00000000 1.23875712 0.00000000 -0.09479757
AGE*GENDER 0 3 -0.02950069 0.00000000 0.00281888 0.00000000
AGE*GENDER 1 4 0.00000000 -0.09479757 0.00000000 0.00861796

```

Tests of Fixed Effects

Source	NDP	DF	Type III F	Pr > F
GENDER	2	25	326.26	0.0001
AGE*GENDER	2	79	78.57	0.0001

 REDUCED MODEL WITH COMPOUND SYMMETRY FOR EACH GENDER 24

The MIXED Procedure
 Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHILD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	282.1928944	0.00045640
1	4	218.15819044	0.00000276
2	1	218.1064467	0.00000000
3	1	218.10614437	0.00000000

Convergence criteria met.

R Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	4.49369990	3.87262345	3.87262345	3.87262345
2	3.87262345	4.49369990	3.87262345	3.87262345
3	3.87262345	3.87262345	4.49369990	3.87262345
4	3.87262345	3.87262345	3.87262345	4.49369990

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.86178951	0.86178951	0.86178951
2	0.86178951	1.00000000	0.86178951	0.86178951
3	0.86178951	0.86178951	1.00000000	0.86178951
4	0.86178951	0.86178951	0.86178951	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Group	Estimate
Variance	CHILD	GENDER 0	0.62107645
	CHILD	GENDER 0	3.87262345
Variance	CHILD	GENDER 1	3.13077016
	CHILD	GENDER 1	2.35304965

 REDUCED MODEL WITH COMPOUND SYMMETRY FOR EACH GENDER 25

Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Log Likelihood	-208.298
Kaizer's Information Criterion	-212.298
Schwarz's Bayesian Criterion	-217.663
-2 Log Likelihood	416.5969
Null Model LRT Chi-Square	64.0868
Null Model LRT DF	3.0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
GENDER	0	16.62184886	0.79452505	25	20.92	0.0001
GENDER	1	18.94287158	0.67903011	25	27.90	0.0001
AGE		0.54780713	0.04680697	80	11.70	0.0001

Covariance Matrix for Fixed Effects

Effect	GENDER	Row	COL1	COL2	COL3
GENDER	0	1	0.63127005	0.26509800	-0.02409982
GENDER	1	2	0.26509800	0.46108189	-0.02409982
AGE		3	-0.02409982	-0.02409982	0.00219089

Tests of Fixed Effects

Source	NDP	DF	Type III F	Pr > F
GENDER	2	25	423.41	0.0001
AGE	1	80	136.97	0.0001

The MIXED Procedure
 Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHILD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

REML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	292.41990255	0.00000000
1	1	223.52715059	0.00000000

Convergence criteria met.

R Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	4.88702060	4.27856889	4.27856889	4.27856889
2	4.27856889	4.88702060	4.27856889	4.27856889
3	4.27856889	4.27856889	4.88702060	4.27856889
4	4.27856889	4.27856889	4.27856889	4.88702060

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.87549639	0.87549639	0.87549639
2	0.87549639	1.00000000	0.87549639	0.87549639
3	0.87549639	0.87549639	1.00000000	0.87549639
4	0.87549639	0.87549639	0.87549639	1.00000000

Covariance Parameter Estimates (RBML)

Cov Parm	Subject	Group	Estimate
Variance	CHILD	GENDER 0	0.60845170
	CHILD	GENDER 0	4.27856889
Variance	CHILD	GENDER 1	2.81642287
	CHILD	GENDER 1	2.64069395

Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Res Log Likelihood	-207.333
Kaizer's Information Criterion	-211.333
Schwarz's Bayesian Criterion	-216.622
-2 Res Log Likelihood	414.6664
Null Model LRT Chi-Square	68.8928
Null Model LRT DF	3.0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
	GENDER 0	17.37272727	0.85874192	25	20.23	0.0001
	GENDER 1	16.3462500	1.12872024	25	14.48	0.0001
	AGE*GENDER 0	0.47954545	0.05258982	79	9.12	0.0001
	AGE*GENDER 1	0.78437500	0.09381536	79	8.36	0.0001

Covariance Matrix for Fixed Effects

Effect	GENDER	Row	COL1	COL2	COL3	COL4
GENDER	0	1	0.73743769	0.00000000	-0.03042259	0.00000000
GENDER	1	2	0.00000000	1.27409338	-0.00000000	-0.09681454
AGE*GENDER	0	3	-0.03042259	0.00000000	0.00276569	0.00000000
AGE*GENDER	1	4	0.00000000	-0.09681454	0.00000000	0.00880132

Tests of Fixed Effects

Source	NDP	DF	Type III F	Pr > F
GENDER	2	25	309.43	0.0001
AGE*GENDER	2	79	76.53	0.0001

ESTIMATE Statement Results

Parameter	Estimate	Std Error	DF	t	Pr > |t|
boy at 11	24.96875000	0.45721929	79	54.61	0.0001

The MIXED Procedure
 Class Level Information

Class	Levels	Values
GENDER	2	0 1
CHILD	27	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ML Estimation Iteration History

Iteration	Evaluations	Objective	Criterion
0	1	279.75103669	0.00000000
1	1	210.32224911	0.00000000

Convergence criteria met.

R Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	4.47040289	3.88038912	3.88038912	3.88038912
2	3.88038912	4.47040289	3.88038912	3.88038912
3	3.88038912	3.88038912	4.47040289	3.88038912
4	3.88038912	3.88038912	3.88038912	4.47040289

R Correlation Matrix for CHILD 1

Row	COL1	COL2	COL3	COL4
1	1.00000000	0.86801776	0.86801776	0.86801776
2	0.86801776	1.00000000	0.86801776	0.86801776
3	0.86801776	0.86801776	1.00000000	0.86801776
4	0.86801776	0.86801776	0.86801776	1.00000000

Covariance Parameter Estimates (MLE)

Cov Parm	Subject	Group	Estimate
Variance	CHILD	GENDER 0	0.59001377
CS	CHILD	GENDER 0	3.88038912
Variance	CHILD	GENDER 1	2.75774740
CS	CHILD	GENDER 1	2.44630334

Model Fitting Information for DISTANCE

Description	Value
Observations	108.0000
Log Likelihood	-204.406
Kaizer's Information Criterion	-208.406
Schwarz's Bayesian Criterion	-213.771
-2 Log Likelihood	408.8130
Null Model LRT Chi-Square	69.4288
Null Model LRT DF	3.0000
Null Model LRT P-Value	0.0000

Solution for Fixed Effects

Effect	GENDER	Estimate	Std Error	DF	t	Pr > |t|
INTERCEPT	0	16.34062500	1.11299466	25	14.68	0.0001
GENDER	1	1.03210227	1.38904167	25	0.74	0.4644
AGE	0	0.00000000	.	.	.	.
AGE	1	0.78437500	0.09283297	79	8.45	0.0001
AGE*GENDER	0	-0.30482955	0.10630071	79	-2.87	0.0053
AGE*GENDER	1	0.00000000	.	.	.	.

Covariance Matrix for Fixed Effects

Effect	GENDER	Row	COL1	COL2	COL3	COL4
INTERCEPT	0	1	1.23875712	-1.23875712	0.00000000	-0.09479757
GENDER	0	2	-1.23875712	1.92943675	0.00000000	0.09479757
GENDER	1	3	0.00000000	0.00000000	0.00000000	0.00000000
AGE	0	4	-0.09479757	0.09479757	0.00000000	0.00861796
AGE*GENDER	0	5	0.09479757	-0.12429826	0.00000000	-0.00861796
AGE*GENDER	1	6	0.00000000	0.00000000	0.00000000	0.00000000

Covariance Matrix for Fixed Effects

COL5	COL6
0.09479757	0.00000000
-0.12429826	0.00000000
0.00000000	0.00000000
-0.00861796	0.00000000
0.01129984	0.00000000
0.00000000	0.00000000

Tests of Fixed Effects

Source	NDP	DDF	Type III	CHISq	Type III	F	Pr >	CHISq	Pr >	F
GENDER	1	25		0.55		0.55	0.4575	0.4644		
AGE	1	79		141.37		141.37	0.0001	0.0001		

FULL MODEL, DIFFERENCE PARAMETERIZATION

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Tests of Fixed Effects

Source	NDP	DDF	Type III	CHISq	Type III	F	Pr >	CHISq	Pr >	F
AGE*GENDER	1	79		8.22		8.22	0.0041	0.0053		