The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1

Number of Observations Read	75
Number of Observations Used	75

Forward Selection: Step 1

Variable Age_oldest_child Entered: R-Square = 0.8661 and C(p) = 71.6892

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	3410.44282	3410.44282	472.11	<.0001
Error	73	527.34385	7.22389		
Corrected Total	74	3937.78667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	33.61939	1.32523	4649.06737	643.57	<.0001
Age_oldest_child	2.15117	0.09900	3410.44282	472.11	<.0001

Bounds on condition number: 1, 1

Forward Selection: Step 2

Variable Weight_oldest_child Entered: R-Square = 0.9215 and C(p) = 14.6344

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3628.69486	1814.34743	422.63	<.0001
Error	72	309.09181	4.29294		
Corrected Total	74	3937.78667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	36.34751	1.09091	4765.72518	1110.13	<.0001
Age_oldest_child	1.27615	0.14452	334.74094	77.97	<.0001
Weight_oldest_child	0.07782	0.01091	218.25204	50.84	<.0001

Bounds on condition number: 3.5855, 14.342

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Forward Selection: Step 3

Sex_oldest_child=1

Variable Height_father Entered: R-Square = 0.9316 and C(p) = 5.8851

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3668.42143	1222.80714	322.31	<.0001
Error	71	269.36524	3.79388		
Corrected Total	74	3937.78667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	17.16893	6.01483	30.91167	8.15	0.0056
Age_oldest_child	1.35946	0.13828	366.70633	96.66	<.0001
Weight_oldest_child	0.07105	0.01047	174.66775	46.04	<.0001
Height_father	0.27090	0.08372	39.72657	10.47	0.0018

Bounds on condition number: 3.7346, 25.474

Forward Selection: Step 4

Variable Height_mother Entered: R-Square = 0.9357 and C(p) = 3.4757

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	3684.71733	921.17933	254.80	<.0001
Error	70	253.06934	3.61528		
Corrected Total	74	3937.78667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	6.94342	7.59422	3.02219	0.84	0.3637
Age_oldest_child	1.38390	0.13547	377.26473	104.35	<.0001
Weight_oldest_child	0.06886	0.01027	162.42143	44.93	<.0001
Height_mother	0.21239	0.10004	16.29590	4.51	0.0373
Height_father	0.22159	0.08496	24.59315	6.80	0.0111

Bounds on condition number: 3.7726, 38.989

No other variable met the 0.5000 significance level for entry into the model.

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

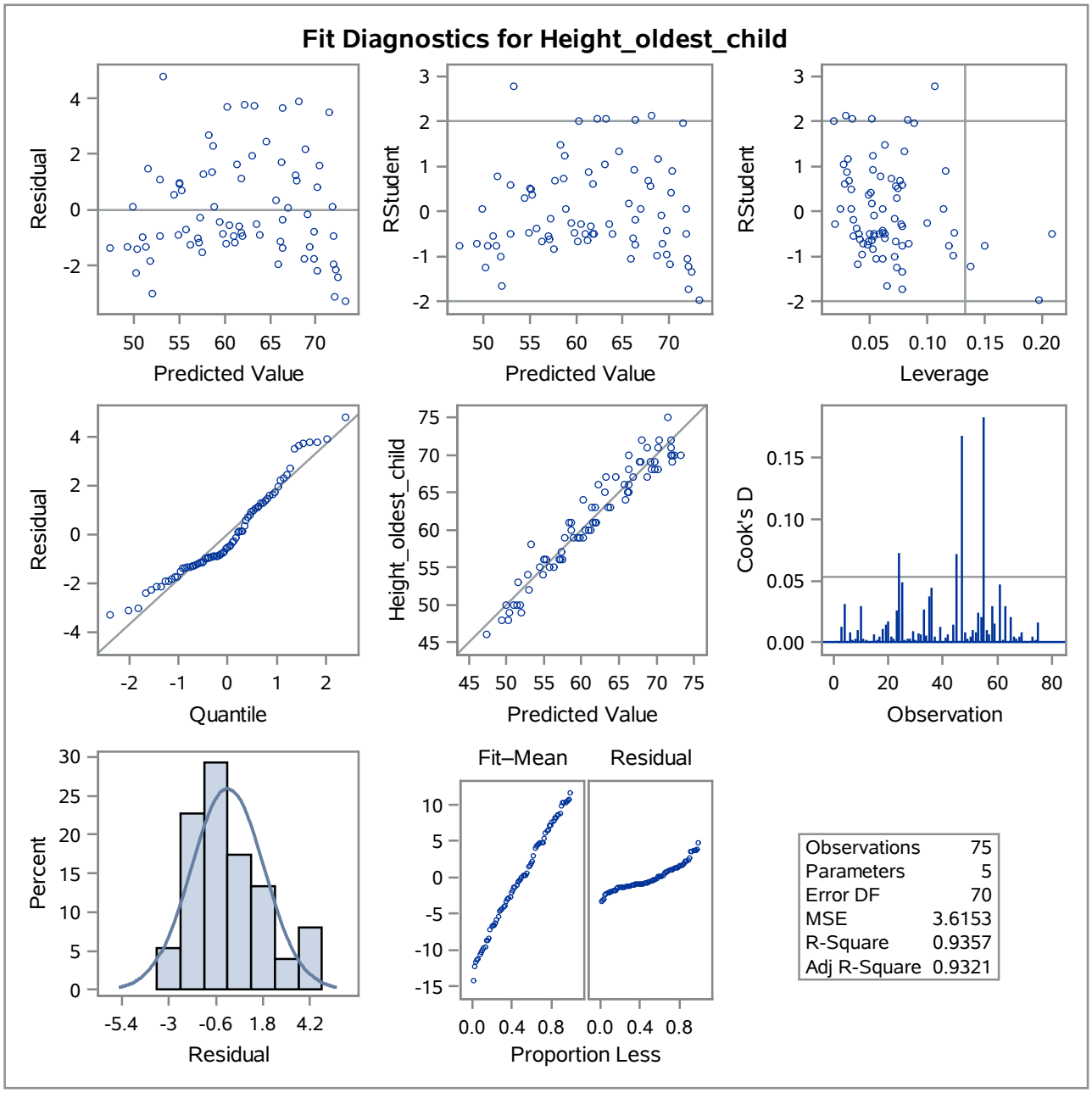
Sex_oldest_child=1

Summary of Forward Selection

Step	Variable Entered	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	Age_oldest_child	1	0.8661	0.8661	71.6892	472.11	<.0001
2	Weight_oldest_child	2	0.0554	0.9215	14.6344	50.84	<.0001
3	Height_father	3	0.0101	0.9316	5.8851	10.47	0.0018
4	Height_mother	4	0.0041	0.9357	3.4757	4.51	0.0373

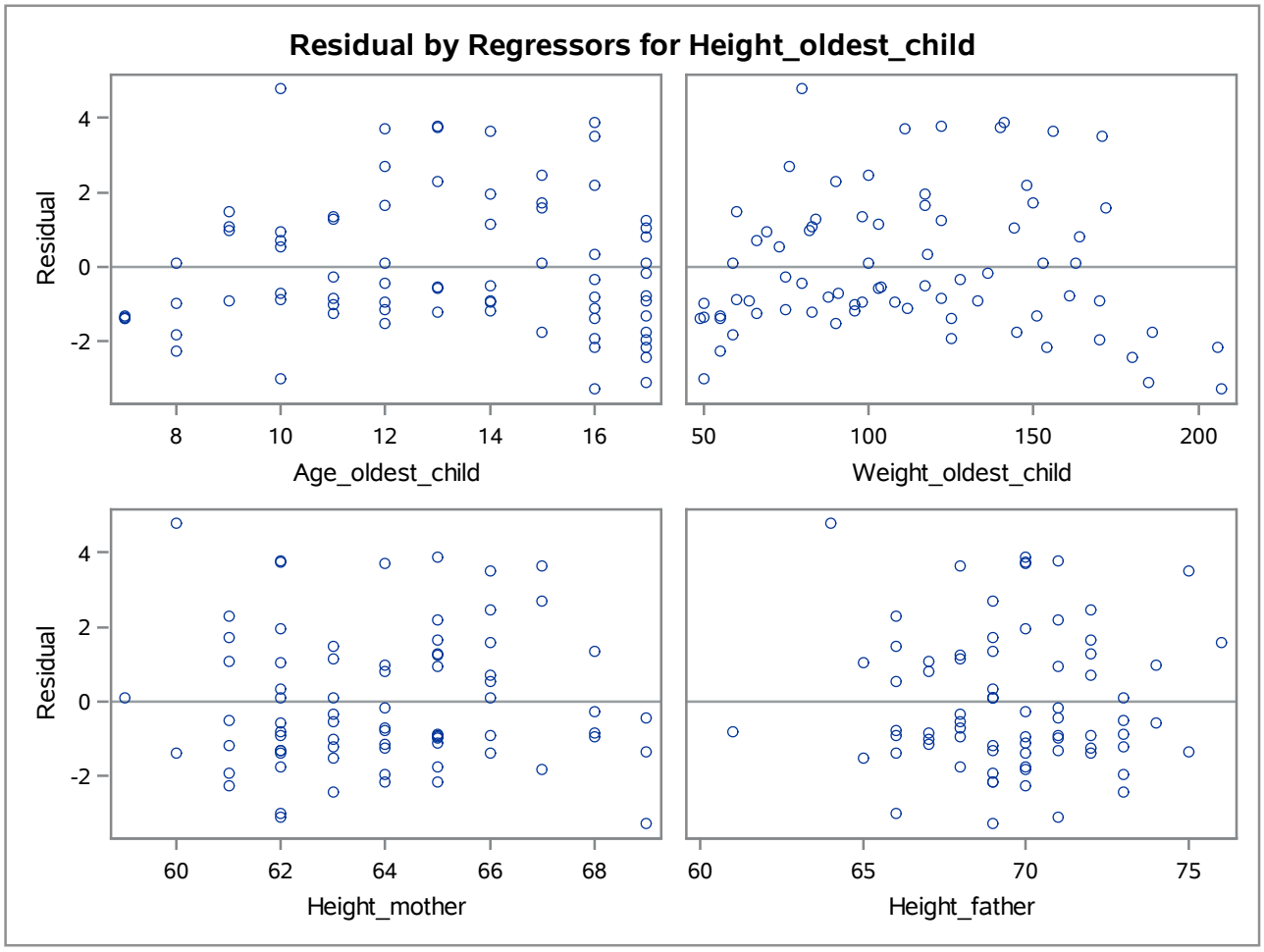
The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1



The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1



The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2

Number of Observations Read	75
Number of Observations Used	75

Forward Selection: Step 1

Variable Age_oldest_child Entered: R-Square = 0.8129 and C(p) = 70.2380

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	2329.93352	2329.93352	317.08	<.0001
Error	73	536.41314	7.34813		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	37.09315	1.24625	6509.63370	885.89	<.0001
Age_oldest_child	1.75301	0.09845	2329.93352	317.08	<.0001

Bounds on condition number: 1, 1

Forward Selection: Step 2

Variable Height_father Entered: R-Square = 0.8517 and C(p) = 42.9286

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	2441.24870	1220.62435	206.74	<.0001
Error	72	425.09796	5.90414		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	6.64317	7.10116	5.16711	0.88	0.3527
Age_oldest_child	1.75533	0.08825	2336.01921	395.66	<.0001
Height_father	0.44123	0.10162	111.31518	18.85	<.0001

Bounds on condition number: 1, 4.0001

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Forward Selection: Step 3

Sex_oldest_child=2

Variable Weight_oldest_child Entered: R-Square = 0.8791 and C(p) = 24.2478

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	2519.79311	839.93104	172.08	<.0001
Error	71	346.55356	4.88104		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	11.23349	6.55727	14.32502	2.93	0.0911
Age_oldest_child	1.21067	0.15771	287.62998	58.93	<.0001
Weight_oldest_child	0.06347	0.01582	78.54440	16.09	0.0001
Height_father	0.38494	0.09345	82.81388	16.97	0.0001

Bounds on condition number: 3.8835, 26.311

Forward Selection: Step 4

Variable Height_mother Entered: R-Square = 0.8976 and C(p) = 12.2759

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	2572.85767	643.21442	153.41	<.0001
Error	70	293.48900	4.19270		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	-4.24181	7.47370	1.35060	0.32	0.5721
Age_oldest_child	1.21050	0.14617	287.55005	68.58	<.0001
Weight_oldest_child	0.06424	0.01467	80.45088	19.19	<.0001
Height_mother	0.33823	0.09507	53.06457	12.66	0.0007
Height_father	0.29323	0.09037	44.14301	10.53	0.0018

Bounds on condition number: 3.8844, 39.808

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Forward Selection: Step 5

Sex_oldest_child=2

Variable Weight_mother Entered: R-Square = 0.9065 and C(p) = 7.5373

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	5	2598.45032	519.69006	133.85	<.0001
Error	69	267.89635	3.88256		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	-4.79998	7.19525	1.72785	0.45	0.5069
Age_oldest_child	1.16471	0.14179	261.99098	67.48	<.0001
Weight_oldest_child	0.07127	0.01438	95.41463	24.58	<.0001
Height_mother	0.41864	0.09670	72.76671	18.74	<.0001
Weight_mother	-0.02107	0.00821	25.59264	6.59	0.0124
Height_father	0.26985	0.08744	36.97924	9.52	0.0029

Bounds on condition number: 4.0302, 57.29

Forward Selection: Step 6

Variable Weight_father Entered: R-Square = 0.9099 and C(p) = 7.0000

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	6	2608.08687	434.68114	114.45	<.0001
Error	68	258.25980	3.79794		
Corrected Total	74	2866.34667			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	-5.42189	7.12711	2.19797	0.58	0.4494
Age_oldest_child	1.10654	0.14491	221.46301	58.31	<.0001
Weight_oldest_child	0.07705	0.01468	104.70337	27.57	<.0001
Height_mother	0.38234	0.09832	57.43524	15.12	0.0002
Weight_mother	-0.01985	0.00815	22.51566	5.93	0.0175
Height_father	0.36579	0.10539	45.75440	12.05	0.0009
Weight_father	-0.02037	0.01279	9.63655	2.54	0.1158

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Forward Selection: Step 6

Sex_oldest_child=2

Bounds on condition number: 4.2933, 85.508

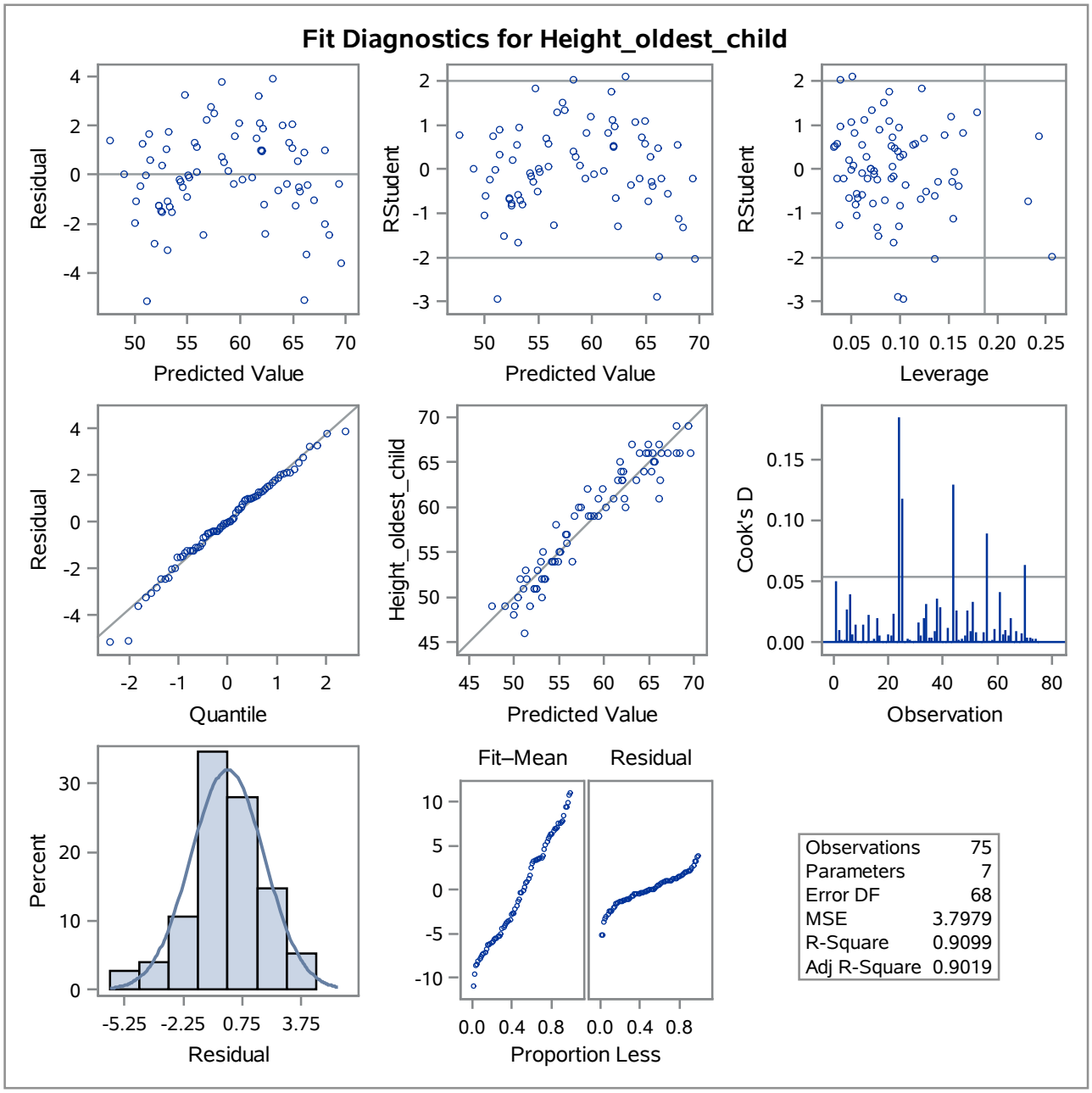
All variables have been entered into the model.

Summary of Forward Selection

Step	Variable Entered	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	Age_oldest_child	1	0.8129	0.8129	70.2380	317.08	<.0001
2	Height_father	2	0.0388	0.8517	42.9286	18.85	<.0001
3	Weight_oldest_child	3	0.0274	0.8791	24.2478	16.09	0.0001
4	Height_mother	4	0.0185	0.8976	12.2759	12.66	0.0007
5	Weight_mother	5	0.0089	0.9065	7.5373	6.59	0.0124
6	Weight_father	6	0.0034	0.9099	7.0000	2.54	0.1158

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2



The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2

Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1

Number of Observations Read	75
Number of Observations Used	75

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3668.42143	1222.80714	322.31	<.0001
Error	71	269.36524	3.79388		
Corrected Total	74	3937.78667			

Root MSE	1.94779	**R-Square**	0.9316
Dependent Mean	61.61333	**Adj R-Sq**	0.9287
Coeff Var	3.16131		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variance Inflation
Intercept	1	17.16893	6.01483	2.85	0.0056	0
Age_oldest_child	1	1.35946	0.13828	9.83	<.0001	3.71429
Weight_oldest_child	1	0.07105	0.01047	6.79	<.0001	3.73459
Height_father	1	0.27090	0.08372	3.24	0.0018	1.04254

Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1

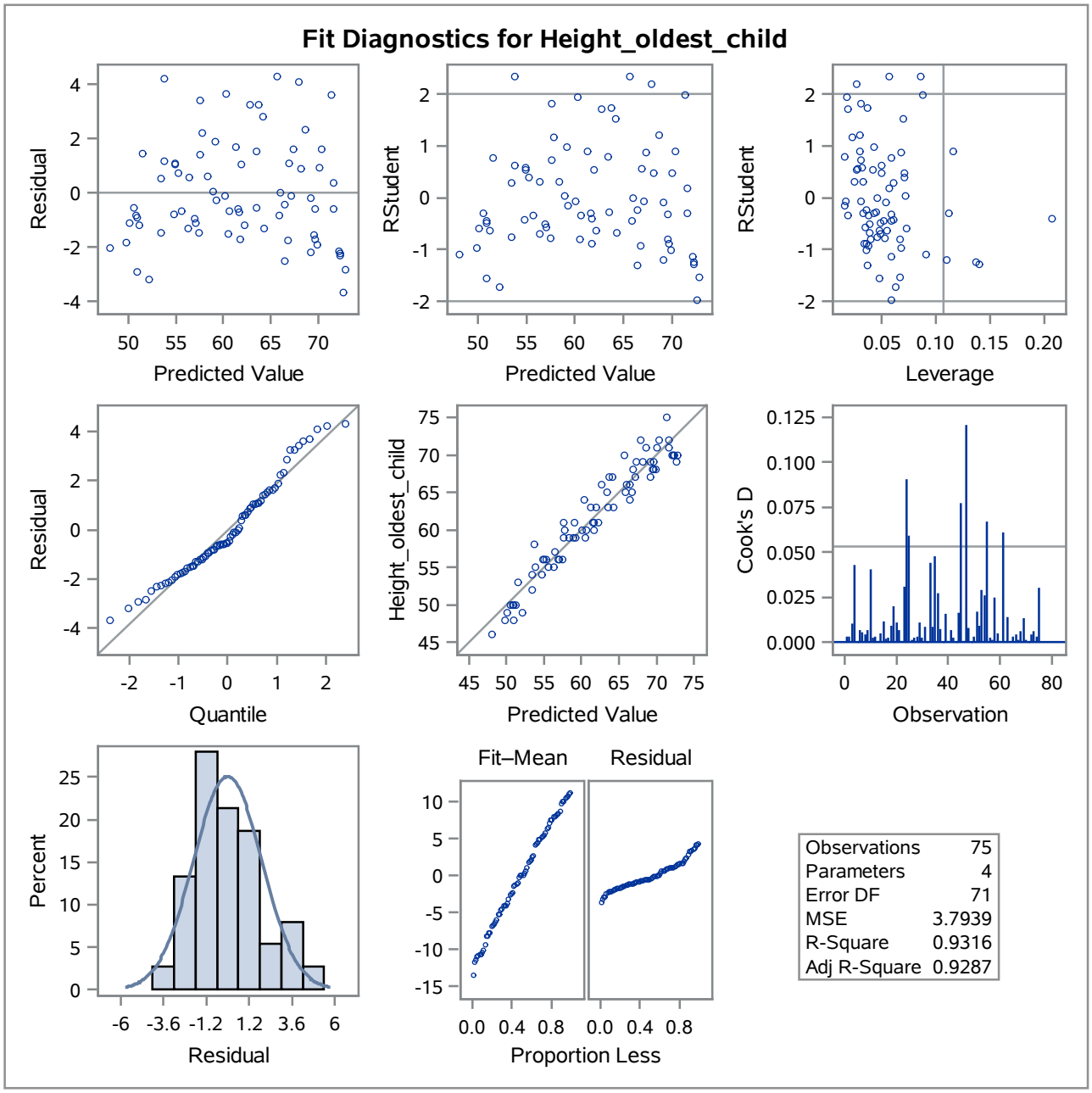
Durbin-Watson D	1.955
Pr < DW	0.4180
Pr > DW	0.5820
Number of Observations	75
1st Order Autocorrelation	0.013

Note: Pr<DW is the p-value for testing positive autocorrelation, and Pr>DW is the p-value for testing negative autocorrelation.

Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

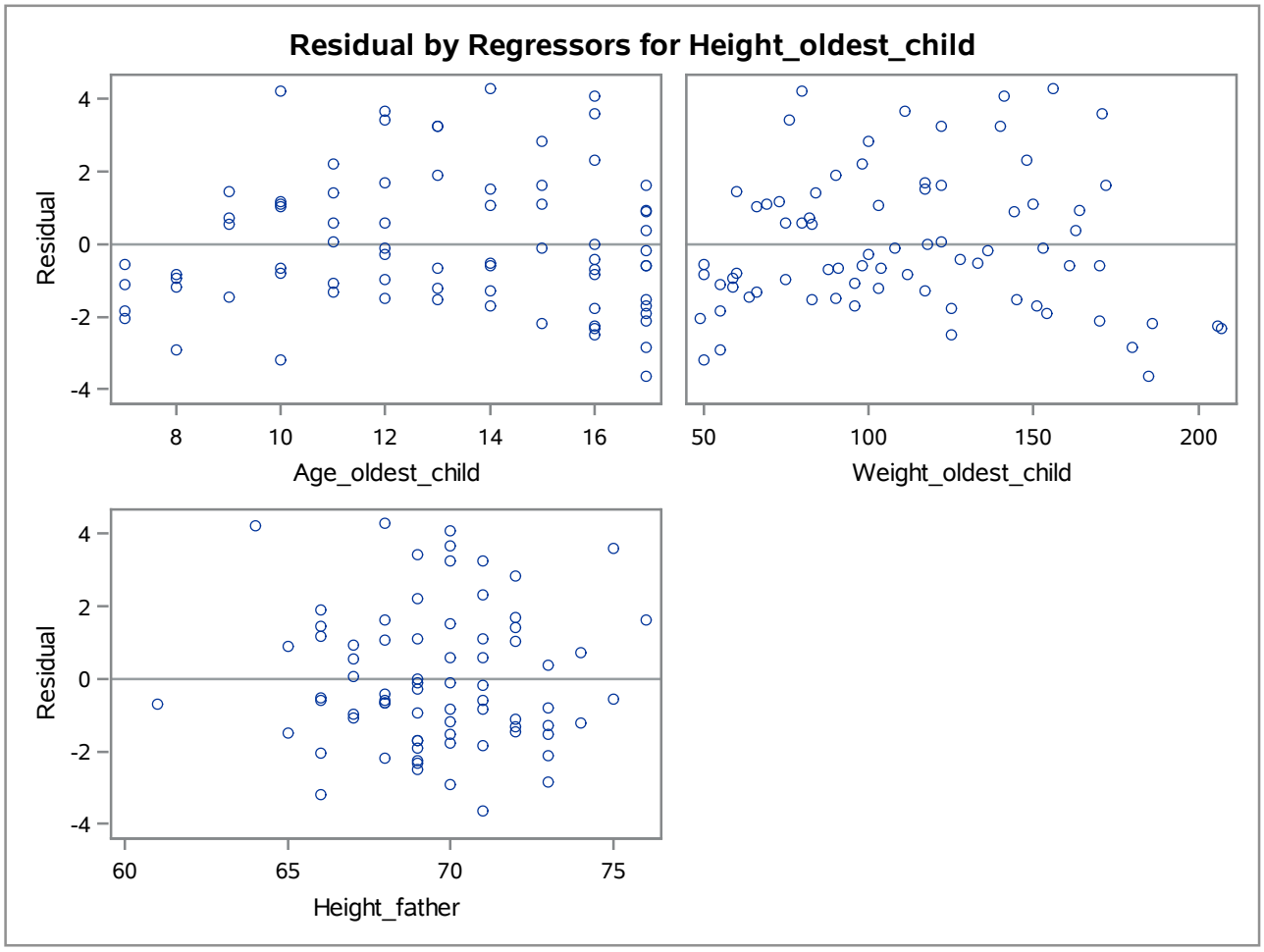
Sex_oldest_child=1



Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=1



Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2

Number of Observations Read	75
Number of Observations Used	75

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	2519.79311	839.93104	172.08	<.0001
Error	71	346.55356	4.88104		
Corrected Total	74	2866.34667			

Root MSE	2.20931	**R-Square**	0.8791
Dependent Mean	58.57333	**Adj R-Sq**	0.8740
Coeff Var	3.77186		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variance Inflation
Intercept	1	11.23349	6.55727	1.71	0.0911	0
Age_oldest_child	1	1.21067	0.15771	7.68	<.0001	3.86361
Weight_oldest_child	1	0.06347	0.01582	4.01	0.0001	3.88353
Height_father	1	0.38494	0.09345	4.12	0.0001	1.02310

Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2

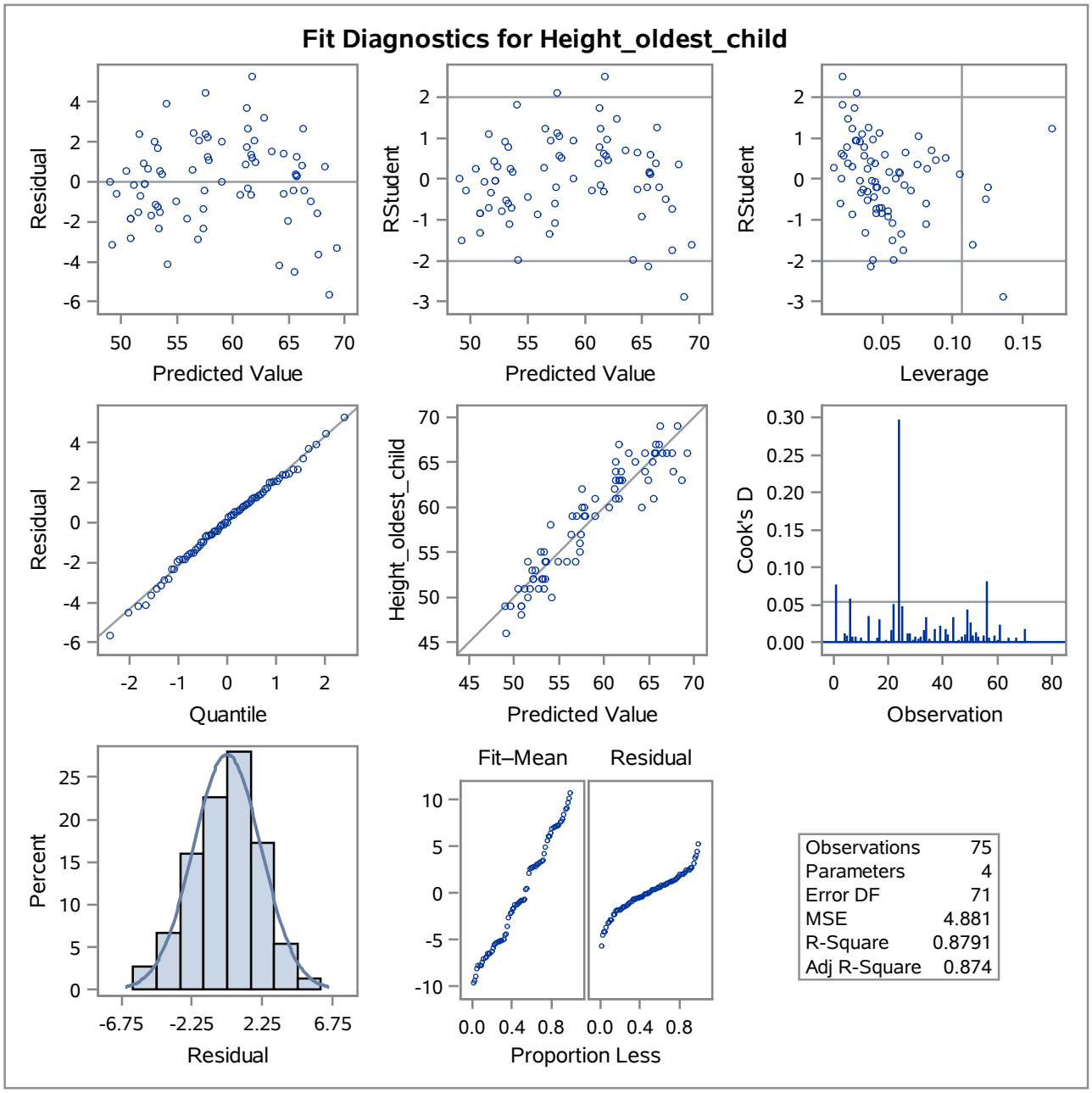
Durbin-Watson D	1.611
Pr < DW	0.0425
Pr > DW	0.9575
Number of Observations	75
1st Order Autocorrelation	0.185

Note: Pr<DW is the p-value for testing positive autocorrelation, and Pr>DW is the p-value for testing negative autocorrelation.

Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

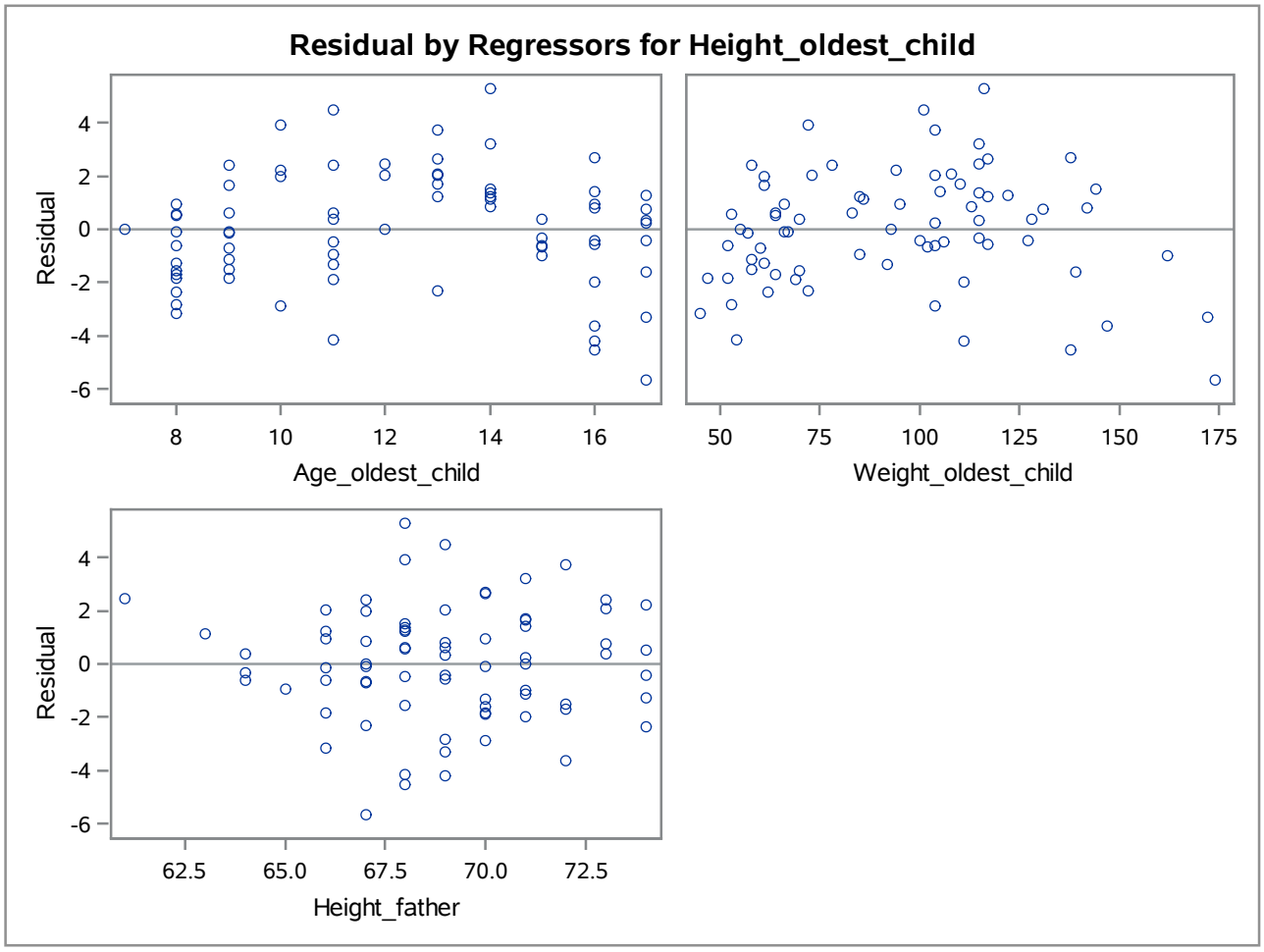
Sex_oldest_child=2



Multiple linear Regression for predicting Height_oldest_child by taking Age_oldest_child Weight_oldest_child Height_father

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Sex_oldest_child=2



The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Number of Observations Read	150
Number of Observations Used	150

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	6513.06449	1628.26612	370.28	<.0001
Error	145	637.62884	4.39744		
Corrected Total	149	7150.69333			

Root MSE	2.09701	R-Square	0.9108
Dependent Mean	60.09333	Adj R-Sq	0.9084
Coeff Var	3.48958		

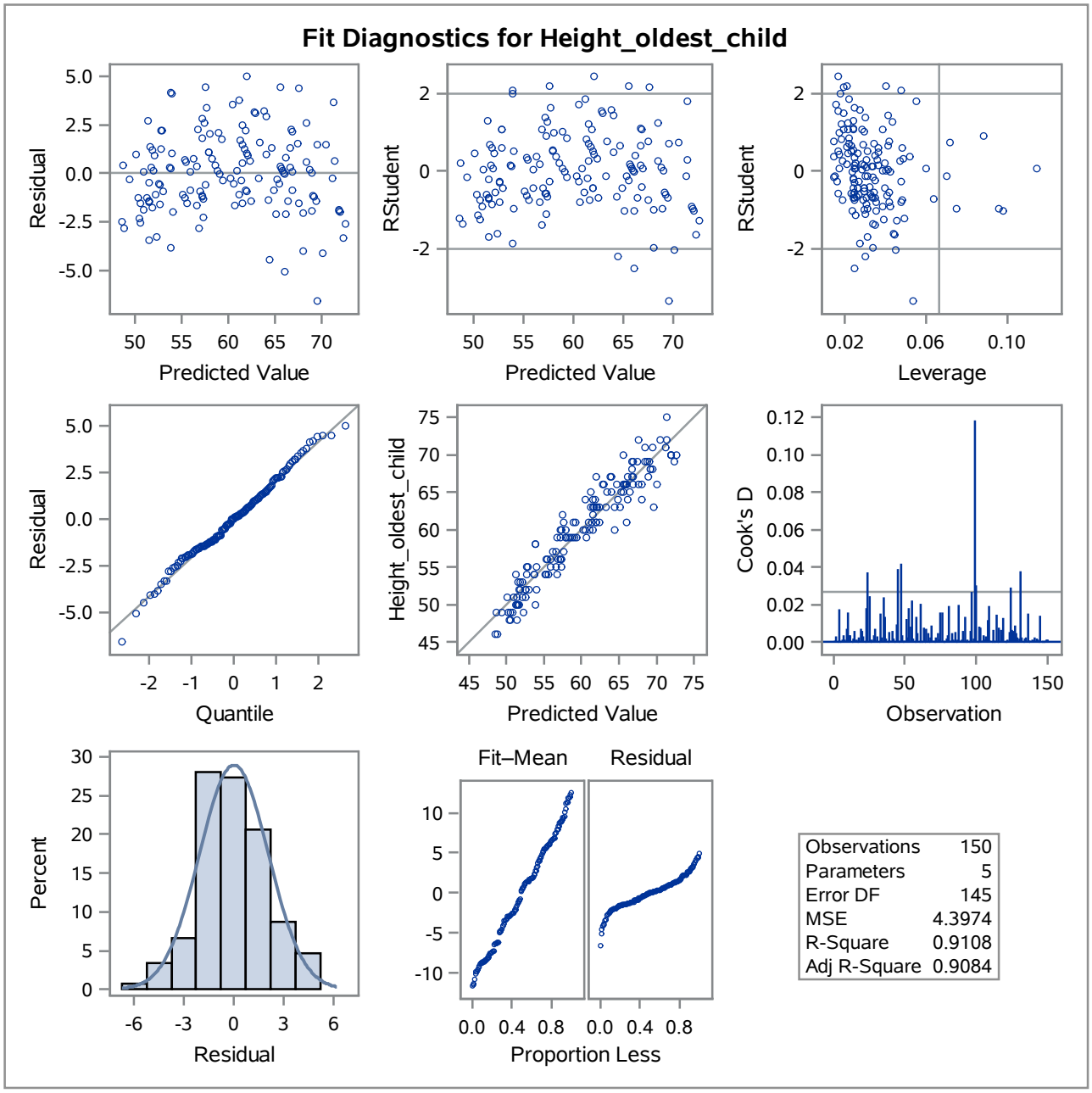
Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variance Inflation
Intercept	1	14.35460	4.46887	3.21	0.0016	0
Male_or_female	1	0.64990	0.35608	1.83	0.0700	1.08124
Age_oldest_child	1	1.24329	0.10260	12.12	<.0001	3.63079
Weight_oldest_child	1	0.07189	0.00879	8.18	<.0001	3.79525
Height_father	1	0.32241	0.06314	5.11	<.0001	1.04341

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child

Durbin-Watson D	1.826
Pr < DW	0.1234
Pr > DW	0.8766
Number of Observations	150
1st Order Autocorrelation	0.086

Note: Pr<DW is the p-value for testing positive autocorrelation, and Pr>DW is the p-value for testing negative autocorrelation.

The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child



The REG Procedure
Model: MODEL1
Dependent Variable: Height_oldest_child