Appendix: Regression Analyses

Additivity: Independent Variables

	Sex	ses_av	aoo	ger_comp	ad_ic2	fg1	fc1	rus_composite
sex	1	0.0633681	-0.14199456	0.39795009	0.09003381	0.32117189	0.14553503	0.3705287
ses_av		1	-0.23534667	-0.05650273	-0.04945634	0.00793347	0.12246182	0.3699994
aoo			*1*	*-0.42654729*	*0.09966628*	*-0.01165456*	*-0.01541193*	*-0.2577772*
ger_comp				1	0.12875774	0.14362893	0.2258743	NA
ad_ic2					1	0.22675078	0.10027338	-0.2049155
fg1						1	0.36047578	0.3124588
fc1							1	-0.0428812
rus_comp								1

Correlation Age of Onset and German Language Proficiency:

t = -2.8296, df = 36, p-value = 0.007574

95 percent confidence interval: -0.6566850 -0.1237367

r = -0.4265473

Correlation Age of Onset L2 and Russian Language Proficiency:

t = -1.6008, df = 36, p-value = 0.1182

95 percent confidence interval: -0.53349669 0.06746577

r = -0.2577772

Story Structure Russian

Step 1: sex

Residuals:

Min	1Q	Median	3Q	Max
-5.5909	-1.1875	-0.1875	1.4091	4.4091

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	5.1875	0.4855	10.685	$1.03e^{-12}$	***
Sex	0.4034	0.638	0.632	0.531	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.942 on 36 degrees of freedom

Multiple R-squared: 0.01098,   Adjusted R-squared: -0.01649

F-statistic: 0.3998 on 1 and 36 DF, p-value: 0.5312

Step 2: SES

3 missing data points (BA08 ma_edu, BA13 & MAD02 pa_edu), only one parent considered

Calculation: sum of both parents' score divided by two

Residuals:

Min	1Q	Median	3Q	Max
-5.402	-1.1174	-0.1866	1.4749	4.598

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	5.7791	1.004	5.756	$1.62e^{-06}$	***
sex	0.431	0.6442	0.669	0.508	
ses_av	-0.2308	0.3421	-0.675	0.504	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.957 on 35 degrees of freedom

Multiple R-squared: 0.02368,   Adjusted R-squared: -0.03211

F-statistic: 0.4245 on 2 and 35 DF, p-value: 0.6574

Compare Step 1 & Step 2

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	36	135.76				
2	35	134.01	1	1.7432	0.4553	0.5043

ΔR^2 = 0.02368-0.01098 = 0.0127

Step 3: Language Proficiency

Residuals:

Min	1Q	Median	3Q	Max
-5.392	-1.1251	-0.2219	1.4585	4.5321

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	5.332254	2.067756	2.579	0.0144	*
sex	0.365514	0.704238	0.519	0.6071	
ses_av	-0.265547	0.373925	-0.71	0.4824	
rus_composite	0.008428	0.033953	0.248	0.8055	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.984 on 34 degrees of freedom

Multiple R-squared: 0.02545,   Adjusted R-squared: -0.06054

F-statistic: 0.2959 on 3 and 34 DF, p-value: 0.828

Compare Step 2 & Step 3

Analysis of Variance Table

	Res.Df	RSS	DF	Sum of Sq	F	Pr(>F)
1	35	134.01				
2	34	133.77	1	0.24242	0.0616	0.8055

$\Delta R^2 = 0.02545-0.02368 = 0.00177$

Step 4a: Figure Ground

Residuals:

Min	1Q	Median	3Q	Max
-5.1901	-0.9703	-0.1927	1.4136	4.2894

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.742406	2.385185	1.988	0.0551	.
sex	0.281122	0.730702	0.385	0.7029	
ses_av	-0.244969	0.380158	-0.644	0.5238	
rus_composite	0.004022	0.035383	0.114	0.9102	
fg1	0.080708	0.157136	0.514	0.6109	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.005 on 33 degrees of freedom

Multiple R-squared: 0.03318,   Adjusted R-squared: -0.08401

F-statistic: 0.2831 on 4 and 33 DF, p-value: 0.8868

Compare Step 3 & Step 4

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	34	133.77				

2	33	132.71	1	1.0609	0.2638	0.6109

$\Delta R^2 = 0.03318 - 0.02545 = 0.00773$

Step 5a: Form Completion

Residuals:

Min	1Q	Median	3Q	Max
-5.1178	-1.0889	-0.1318	1.4891	4.257

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)
(Intercept)	3.21084	3.53281	0.909	0.37
Sex	0.23383	0.74229	0.315	0.755
ses_av	-0.29698	0.39385	-0.754	0.456
rus_composite	0.00987	0.03707	0.266	0.792
fg1	0.04034	0.1727	0.234	0.817
fc1	0.14719	0.24834	0.593	0.558

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.025 on 32 degrees of freedom

Multiple R-squared: 0.04367,   Adjusted R-squared: -0.1058

F-statistic: 0.2923 on 5 and 32 DF, p-value: 0.9137

Compare Step 4 & Step 5

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	33	132.71				
2	32	131.27	1	1.441	0.3513	0.5576

$\Delta R^2 = 0.04367 - 0.03318 = 0.01049$

Step 4b: Form Completion

Residuals:

Min	1Q	Median	3Q	Max
-5.1917	-1.0317	-0.1409	1.4957	4.3544

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	3.22176	3.48153	0.925	0.361	(Intercept)
Sex	0.2621	0.72179	0.363	0.719	sex
ses_av	-0.31375	0.38167	-0.822	0.417	ses_av
rus_composite	0.01264	0.03462	0.365	0.717	rus_composite
fc1	0.17006	0.22492	0.756	0.455	fc1

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.996 on 33 degrees of freedom

Multiple R-squared: 0.04204,   Adjusted R-squared: -0.07407

F-statistic: 0.3621 on 4 and 33 DF, p-value: 0.8338

Compare Step 3 & Step 4

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	34	133.77				
2	33	131.49	1	2.2781	0.5717	0.4549

ΔR^2 = 0.04204 - 0.02545 = 0.01659

Step 5b: Figure Ground [= Step 5a]

Residuals:

Min	1Q	Median	3Q	Max
-5.1178	-1.0889	-0.1318	1.4891	4.257

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)
(Intercept)	3.21084	3.53281	0.909	0.37
Sex	0.23383	0.74229	0.315	0.755
ses_av	-0.29698	0.39385	-0.754	0.456
rus_composite	0.00987	0.03707	0.266	0.792
fc1	0.14719	0.24834	0.593	0.558
fg1	0.04034	0.1727	0.234	0.817

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.025 on 32 degrees of freedom

Multiple R-squared: 0.04367,   Adjusted R-squared: -0.1058

F-statistic: 0.2923 on 5 and 32 DF, p-value: 0.9137

Compare Step 4 & Step 5

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	33	131.49				
2	32	131.27	1	0.22383	0.0546	0.8168

$\Delta R^2 = 0.04367 - 0.04204 = 0.00163$

``````````````````````````````````````````````````````````````````````````````````````````````````

*Step 6: Attention Divided*

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -4.9495 | -0.9767 | -0.0502 | 0.8055 | 3.7701 |

Coefficients:

|   | Estimate | Std. Error | t-value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 1.0221 | 3.66521 | 0.279 | 0.7822 |
| Sex | 0.07293 | 0.72736 | 0.1 | 0.9208 |
| ses_av | -0.35682 | 0.38427 | -0.929 | 0.3603 |
| rus_composite | 0.03116 | 0.03813 | 0.817 | 0.4201 |
| fg1 | -0.0465 | 0.17537 | -0.265 | 0.7926 |
| fc1 | 0.17387 | 0.24179 | 0.719 | 0.4775 |
| ad_ic2 | 0.18625 | 0.10938 | 1.703 | 0.0986 |

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.968 on 31 degrees of freedom

Multiple R-squared: 0.1255,   Adjusted R-squared: -0.0438

F-statistic: 0.7412 on 6 and 31 DF, p-value: 0.6206

*Compare Step 5 & Step 6*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 32 | 131.27 | | | | |
| 2 | 31 | 120.04 | 1 | 11.227 | 2.8993 | 0.09863 . |

$\Delta R^2 = 0.1255 - 0.04367 = 0.08183$

**Story Structure German**

*Step 1: sex*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.3182 | -2.0682 | 0.2784 | 1.4801 | 4.875 |

Coefficients:

| | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|---|---|---|---|---|
| (Intercept) | 3.125 | 0.5781 | 5.405 | $4.33e^{-06}$ | *** |
| Sex | 1.1932 | 0.7598 | 1.57 | 0.125 | |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.313 on 36 degrees of freedom

Multiple R-squared:  0.06411,   Adjusted R-squared:  0.03811

F-statistic: 2.466 on 1 and 36 DF,  p-value: 0.1251

*Step 2: SES*

3 missing data points (BA08 ma_edu, BA13 & MAD02 pa_edu), only one parent considered

Calculation: sum of both parents' score divided by two

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.3343 | -1.9957 | 0.2454 | 1.522 | 5.0023 |

Coefficients:

| | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|---|---|---|---|---|
| (Intercept) | 3.35201 | 1.20253 | 2.787 | 0.00853 | ** |
| Sex | 1.20375 | 0.77163 | 1.56 | $1.28e^{-01}$ | |
| ses_av | -0.08859 | 0.4098 | -0.216 | 0.83011 | |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.344 on 35 degrees of freedom

Multiple R-squared:  0.06536,   Adjusted R-squared:  0.01195

F-statistic: 1.224 on 2 and 35 DF,  p-value: 0.3064

*Compare Step 1 & Step 2*

Analysis of Variance Table

| | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 36 | 192.52 | | | | |
| 2 | 35 | 192.27 | 1 | 0.2567 | 0.0467 | 0.8301 |

$\Delta R^2 = 0.06536 - 0.06411 = 0.00125$

*Step 3: Language Proficiency*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.1289 | -1.5243 | -0.4075 | 1.2899 | 4.2587 |

Coefficients:

| | Estimate | Std. Error | t-value | Pr(>\|t\|) | |
|---|---|---|---|---|---|
| (Intercept) | 0.20265 | 1.49268 | 0.136 | 0.89281 | |
| Sex | 0.27017 | 0.75757 | 0.357 | 0.72358 | |
| ses_av | 0.01232 | 0.36969 | 0.033 | 0.97361 | |
| **ger_composite** | **0.07709** | **0.02521** | **3.058** | **0.00432** | ** |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.106 on 34 degrees of freedom

**Multiple R-squared: 0.267**,     Adjusted R-squared: 0.2023

**F-statistic: 4.128 on 3 and 34 DF,  p-value: 0.01341**

*Compare Step 2 & Step 3*

Analysis of Variance Table

| | Res.Df | RSS | DF | Sum of Sq | F | Pr(>F) | |
|---|---|---|---|---|---|---|---|
| 1 | 35 | 192.27 | | | | | |
| 2 | 34 | 150.79 | 1 | 41.475 | 9.3517 | 0.004322 | ** |

$\Delta R^2 = 0.267 - 0.06536 = 0.20164$

*Step 4a: Figure Ground*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0817 | -1.5364 | -0.5261 | 1.5024 | 4.151 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>|t|) |  |
|---|---|---|---|---|---|
| (Intercept) | -0.56029 | 2.22564 | -0.252 | 0.8028 |  |
| sex | 0.16154 | 0.801 | 0.202 | 0.84141 |  |
| ses_av | 0.01434 | 0.37405 | 0.038 | 0.96965 |  |
| ger_composite | 0.07688 | 0.02551 | 3.014 | 0.00492 | ** |
| fg1 | 0.0756 | 0.16199 | 0.467 | 0.64381 |  |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.131 on 33 degrees of freedom

Multiple R-squared:  0.2718,   Adjusted R-squared:  0.1835

F-statistic: 3.079 on 4 and 33 DF,  p-value: 0.02927

*Compare Step 3 & Step 4*

Analysis of Variance Table

|  | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 34 | 150.79 |  |  |  |  |
| 2 | 33 | 149.8 | 1 | 0.98856 | 0.2178 | 0.6438 |

$\Delta R^2$ = 0.2718 - 0.267 = 0.0048

*Step 5a: Form Completion*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0617 | -1.7924 | 0.1574 | 1.7051 | 3.5916 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>|t|) |  |
|---|---|---|---|---|---|
| (Intercept) | -4.24871 | 2.90688 | -1.462 | 0.1536 |  |
| sex | 0.24114 | 0.77308 | 0.312 | 0.7571 |  |
| ses_av | -0.08605 | 0.3644 | -0.236 | 0.8148 |  |
| ger_composite | 0.06727 | 0.02511 | 2.679 | 0.0115 | * |
| fg1 | -0.03122 | 0.16613 | -0.188 | 0.8521 |  |
| fc1 | 0.46595 | 0.24786 | 1.88 | 0.0693 | . |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.053 on 32 degrees of freedom

Multiple R-squared:  0.3442,   Adjusted R-squared:  0.2417

F-statistic: 3.359 on 5 and 32 DF,  p-value: 0.01498

*Compare Step 4 & Step 5*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 33 | 149.8 | | | | |
| 2 | 32 | 134.9 | 1 | 14.898 | 3.5339 | 0.06926 . |

$\Delta R^2$ = 0.3442 - 0.2718 = 0.0724

`````````````````````````````````````````````````````````````````````````````````

*Step 4b: Form Completion*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0452 | -1.8289 | 0.0552 | 1.7223 | 3.671 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>\|t\|) | |
|---|---|---|---|---|---|
| (Intercept) | -4.40082 | 2.7508 | -1.6 | 0.11917 | |
| sex | 0.19881 | 0.72864 | 0.273 | 0.78667 | |
| ses_av | -0.08188 | 0.35837 | -0.228 | 0.82068 | |
| ger_composite | 0.06753 | 0.0247 | 2.734 | 0.00999 | ** |
| fc1 | 0.45002 | 0.22949 | 1.961 | 0.05836 | . |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.023 on 33 degrees of freedom

Multiple R-squared:  0.3435,   Adjusted R-squared:  0.2639

F-statistic: 4.316 on 4 and 33 DF,  p-value: 0.006435

*Compare Step 3 & Step 4*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 34 | 150.79 | | | | |
| 2 | 33 | 135.05 | 1 | 15.738 | 3.8455 | 0.05836 |

$\Delta R^2$ = 0.3435 - 0.267 = 0.0765

*Step 5b: Figure Ground [= Step 5a]*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0617 | -1.7924 | 0.1574 | 1.7051 | 3.5916 |

Coefficients:

| | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|---|---|---|---|---|
| (Intercept) | -4.24871 | 2.90688 | -1.462 | 0.1536 | |
| sex | 0.24114 | 0.77308 | 0.312 | 0.7571 | |
| ses_av | -0.08605 | 0.3644 | -0.236 | 0.8148 | |
| ger_composite | 0.06727 | 0.02511 | 2.679 | 0.0115 | * |
| fc1 | 0.46595 | 0.24786 | 1.88 | 0.0693 | . |
| fg1 | -0.03122 | 0.16613 | -0.188 | 0.8521 | |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.053 on 32 degrees of freedom

Multiple R-squared:  0.3442,   Adjusted R-squared:  0.2417

F-statistic: 3.359 on 5 and 32 DF,  p-value: 0.01498

*Compare Step 4 & Step 5*

Analysis of Variance Table

| | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 33 | 135.05 | | | | |
| 2 | 32 | 134.9 | 1 | 0.14886 | 0.0353 | 0.8521 |

$\Delta R^2 = 0.3442 - 0.3435 = 7e^{-04}$

```````````````````````````````````````````````````````````````````````````````````````````````````

Step 6: Attention Divided

Min	1Q	Median	3Q	Max
-3.146	-1.6329	0.0736	1.6791	3.7389

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	-4.65631	2.96784	-1.569	0.1268	
sex	0.25086	0.7776	0.323	0.7492	
ses_av	-0.07257	0.36688	-0.198	0.8445	
ger_composite	0.0654	0.02536	2.579	0.0149	*

fg1	-0.05761	0.17032	-0.338	0.7375	
fc1	0.46445	0.24929	1.863	0.0719	.
ad_ic2	0.08688	0.1089	0.798	0.4311	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.065 on 31 degrees of freedom

Multiple R-squared: 0.3574,   Adjusted R-squared: 0.233

F-statistic: 2.874 on 6 and 31 DF, p-value: 0.02412

Compare Step 5 & Step 6

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	32	134.9				
2	31	132.19	1	2.714	0.6365	0.4311

$\Delta R^2 = 0.3574 - 0.3442 = 0.0132$

Story Complexity Russian

Step 1: sex

Residuals:

Min	1Q	Median	3Q	Max
-3.3182	-0.8764	-0.3182	0.6818	3.9375

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.0625	0.3378	12.028	$3.60e^{-14}$	***
sex	-0.7443	0.4439	-1.677	0.102	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.351 on 36 degrees of freedom

Multiple R-squared: 0.07244, Adjusted R-squared: 0.04668

F-statistic: 2.812 on 1 and 36 DF, p-value: 0.1023

Step 2: SES

3 missing data points (BA08 ma_edu, BA13 & MAD02 pa_edu), only one parent considered

Calculation: sum of both parents' score divided by two

Residuals:

Min	1Q	Median	3Q	Max
-3.3223	-0.8722	-0.311	0.6827	3.9429

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.049592	0.703007	5.76	$1.60e^{-06}$	***
sex	-0.744919	0.451101	-1.651	0.108	
ses_av	0.005037	0.239573	0.021	0.983	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.37 on 35 degrees of freedom

Multiple R-squared: 0.07245, Adjusted R-squared: 0.01945

F-statistic: 1.367 on 2 and 35 DF, p-value: 0.2682

Compare Step 1 & Step 2

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	36	65.71				
2	35	65.709	1	0.00083002	$4.00e^{-04}$	0.9833

ΔR^2 = 0.07245-0.07244 = $1e^{-05}$

Step 3: Language Proficiency

Residuals:

Min	1Q	Median	3Q	Max
-3.3651	-0.7108	-0.1156	0.6945	3.9

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	5.95972	1.39951	4.258	0.000153	***
sex	-0.46516	0.47664	-0.976	0.336009	
ses_av	0.15337	0.25308	0.606	0.54852	
rus_composite	-0.03603	0.02298	-1.568	0.126163	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.343 on 34 degrees of freedom

Multiple R-squared: 0.135,   Adjusted R-squared: 0.05867

F-statistic: 1.769 on 3 and 34 DF, p-value: 0.1717

Compare Step 2 & Step 3

Analysis of Variance Table

	Res.Df	RSS	DF	Sum of Sq	F	Pr(>F)
1	35	65.709				
2	34	61.279	1	4.4307	2.4583	0.1262

ΔR^2 = 0.135 - 0.07245 = 0.06255

Step 4a: Figure Ground

Residuals:

Min	1Q	Median	3Q	Max
-2.7898	-0.6526	-0.0451	0.6383	3.2313

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.27892	1.50255	2.848	0.00752	**
sex	-0.70563	0.46031	-1.533	0.13482	
ses_av	0.21201	0.23948	0.885	0.3824	
rus_composite	**-0.04859**	**0.02229**	**-2.18**	**0.03651**	*
fg1	**0.22998**	**0.09899**	**2.323**	**0.02647**	*

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.263 on 33 degrees of freedom

Multiple R-squared: 0.2566,   Adjusted R-squared: 0.1665

F-statistic: 2.848 on 4 and 33 DF, p-value: 0.03927

Compare Step 3 & Step 4

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	34	61.279				

2	33	52.664	1	8.6143	5.3978	0.02647 *

$\Delta R^2 = 0.2566 - 0.135 = 0.1216$

Step 5a: Form Completion

Residuals:

Min	1Q	Median	3Q	Max
-2.7817	-0.6312	-0.0575	0.6124	3.2509

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.10841	2.2373	1.836	0.0756	.
sex	-0.7109	0.47009	-1.512	0.1403	
ses_av	0.20622	0.24942	0.827	0.4145	
rus_composite	-0.04794	0.02348	-2.042	0.0495	*
fg1	0.22549	0.10937	2.062	0.0474	*
fc1	0.01639	0.15727	0.104	0.9177	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.283 on 32 degrees of freedom

Multiple R-squared: 0.2568,   Adjusted R-squared: 0.1407

F-statistic: 2.212 on 5 and 32 DF, p-value: 0.07736

Compare Step 4 & Step 5

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	33	52.664				
2	32	52.646	1	0.017859	0.0109	0.9177

$\Delta R^2 = 0.2568 - 0.2566 = 2e^{-04}$

~~~~~~

Step 4b: Form Completion

Residuals:

Min	1Q	Median	3Q	Max
-3.1951	-0.6794	-0.1321	0.6171	3.9576

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.16949	2.3447	1.778	0.0846	.
sex	-0.55288	0.4861	-1.137	0.2636	
ses_av	0.11248	0.25704	0.438	0.6645	
rus_composite	-0.03246	0.02332	-1.392	0.1732	
fc1	0.14426	0.15147	0.952	0.3478	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.344 on 33 degrees of freedom

Multiple R-squared: 0.1581,   Adjusted R-squared: 0.05609

F-statistic: 1.55 on 4 and 33 DF, p-value: 0.2108

Compare Step 3 & Step 4

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	34	61.279				
2	33	59.64	1	1.6392	0.907	0.3478

$\Delta R^2 = 0.1581 - 0.135 = 0.0231$

Step 5b: Figure Ground [= Step 5a]

Residuals:

Min	1Q	Median	3Q	Max
-2.7817	-0.6312	-0.0575	0.6124	3.2509

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	4.10841	2.2373	1.836	0.0756	.
sex	-0.7109	0.47009	-1.512	0.1403	
ses_av	0.20622	0.24942	0.827	0.4145	
rus_composite	-0.04794	0.02348	-2.042	0.0495	*
fc1	0.01639	0.15727	0.104	0.9177	
fg1	0.22549	0.10937	2.062	0.0474	*

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.283 on 32 degrees of freedom

Multiple R-squared: 0.2568,   Adjusted R-squared: 0.1407

F-statistic: 2.212 on 5 and 32 DF, p-value: 0.07736

Compare Step 4 & Step 5

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)	
1	33	59.64					
2	32	52.646	1	6.993	4.2506	0.04744	*

$\Delta R^2 = 0.2568 - 0.1581 = 0.0987$

``````````````````````````````````````````````````````````````````````````````````````````

*Step 6: Attention Divided*

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -2.8134 | -0.64181 | -0.05916 | 0.59879 | 3.14253 |

Coefficients:

|   | Estimate | Std. Error | t-value | Pr(>\|t\|) | |
|---|----------|-----------|---------|-----------|---|
| (Intercept) | 4.52054 | 2.41808 | 1.869 | 0.071 | . |
| sex | -0.6806 | 0.47987 | -1.418 | 0.1661 | |
| ses_av | 0.21749 | 0.25352 | 0.858 | 0.3975 | |
| rus_composite | -0.05194 | 0.02515 | -2.065 | 0.0474 | * |
| fg1 | 0.24184 | 0.1157 | 2.09 | 0.0449 | * |
| fc1 | 0.01136 | 0.15952 | 0.071 | 0.9437 | |
| ad_ic2 | -0.03507 | 0.07216 | -0.486 | 0.6304 | |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.298 on 31 degrees of freedom

Multiple R-squared:  0.2625,   Adjusted R-squared:  0.1197

F-statistic: 1.839 on 6 and 31 DF,  p-value: 0.1239

*Compare Step 5 & Step 6*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|--------|-----|----|-----------|---|--------|
| 1 | 32 | 52.646 | | | | |
| 2 | 31 | 52.248 | 1 | 0.39806 | 0.2362 | 0.6304 |

$\Delta R^2 = 0.2625 - 0.2568 = 0.0057$

**Story Complexity German**

*Step 1: sex*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -2.9545 | -0.9545 | 0.0455 | 1.1875 | 4.1875 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>\|t\|) |  |
|--|----------|------------|---------|-----------|--|
| (Intercept) | 2.8125 | 0.4703 | 5.98 | 7.38e$^{-07}$ | *** |
| sex | 0.142 | 0.6181 | 0.23 | 0.82 |  |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.881 on 36 degrees of freedom

Multiple R-squared: 0.001465, Adjusted R-squared: -0.02627

F-statistic: 0.05282 on 1 and 36 DF, p-value: 0.8195

*Step 2: SES*

3 missing data points (BA08 ma_edu, BA13 & MAD02 pa_edu), only one parent considered

Calculation: sum of both parents' score divided by two

Residuals:

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -3.1144 | -1.2314 | 0.1361 | 1.1886 | 3.8856 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>\|t\|) |  |
|--|----------|------------|---------|-----------|--|
| (Intercept) | 2.2744 | 0.9733 | 2.337 | 0.0253 | * |
| sex | 0.117 | 0.6245 | 0.187 | 0.8525 |  |
| ses_av | 0.21 | 0.3317 | 0.633 | 0.5308 |  |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.897 on 35 degrees of freedom

Multiple R-squared: 0.01277,  Adjusted R-squared: -0.04364

F-statistic: 0.2264 on 2 and 35 DF, p-value: 0.7986

*Compare Step 1 & Step 2*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|--------|-----|----|-----------|---|--------|
| 1 | 36 | 127.39 | | | | |
| 2 | 35 | 125.95 | 1 | 1.4426 | 0.4009 | 0.5308 |

$\Delta R^2$ = 0 0.01277 - 0.001465 = 0.011305

*Step 3: Language Proficiency*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -3.07223 | -1.34298 | -0.07412 | 1.34746 | 3.12617 |

Coefficients:

|   | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|----------|-----------|---------|----------|---|
| (Intercept) | 0.48934 | 1.29003 | 0.379 | 0.7068 | |
| sex | -0.41216 | 0.65472 | -0.63 | 0.5332 | |
| ses_av | 0.2672 | 0.3195 | 0.836 | 0.4088 | |
| ger_composite | 0.04369 | 0.02179 | 2.006 | 0.0529 | . |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.82 on 34 degrees of freedom

Multiple R-squared:  0.1172,   Adjusted R-squared:  0.03932

F-statistic: 1.505 on 3 and 34 DF,  p-value: 0.2309

*Compare Step 2 & Step 3*

Analysis of Variance Table

|   | Res.Df | RSS | DF | Sum of Sq | F | Pr(>F) | |
|---|--------|-----|----|-----------|---|--------|---|
| 1 | 35 | 125.95 | | | | | |
| 2 | 34 | 112.63 | 1 | 13.324 | 4.0223 | 0.05291 | . |

$\Delta R^2$ = 0.1172- 0.01277 = 0.10443

*Step 4a: Figure Ground*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -2.93704 | -1.30464 | -0.02765 | 1.02712 | 2.91679 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|---|---|---|---|---|
| (Intercept) | -0.63971 | 1.91117 | -0.335 | 0.74 | |
| sex | -0.57291 | 0.68783 | -0.833 | 0.411 | |
| ses_av | 0.27019 | 0.3212 | 0.841 | 0.406 | |
| ger_composite | 0.04339 | 0.0219 | 1.981 | 0.056 | . |
| fg1 | 0.11187 | 0.1391 | 0.804 | 0.427 | |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.83 on 33 degrees of freedom

Multiple R-squared: 0.1342,    Adjusted R-squared: 0.02923

F-statistic: 1.279 on 4 and 33 DF,  p-value: 0.2983

*Compare Step 3 & Step 4*

Analysis of Variance Table

|  | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|---|---|---|---|---|---|
| 1 | 34 | 112.63 | | | | |
| 2 | 33 | 110.46 | 1 | 2.165 | 0.6468 | 0.427 |

$\Delta R^2 = 0.1342 - 0.1172 = 0.017$

*Step 5a: Form Completion*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0025 | -1.2059 | 0.1343 | 1.1805 | 2.7708 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>|t|) | |
|---|---|---|---|---|---|
| (Intercept) | -4.391882 | 2.439913 | -1.8 | 0.0813 | . |
| sex | -0.49193 | 0.648889 | -0.758 | 0.4539 | |
| ses_av | 0.168063 | 0.305861 | 0.549 | 0.5865 | |
| ger_composite | 0.033614 | 0.021073 | 1.595 | 0.1205 | |
| fg1 | 0.003211 | 0.139442 | 0.023 | 0.9818 | |
| fc1 | 0.474006 | 0.208047 | 2.278 | 0.0295 | * |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.723 on 32 degrees of freedom

Multiple R-squared: 0.255,    Adjusted R-squared: 0.1386

F-statistic: 2.191 on 5 and 32 DF,  p-value: 0.07978

*Compare Step 4 & Step 5*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) | |
|---|--------|-----|----|-----------|---|--------|---|
| 1 | 33 | 110.461 | | | | | |
| 2 | 32 | 95.043 | 1 | 15.418 | 5.1909 | 0.02952 | * |

$\Delta R^2$ = 0.255-0.1342 = 0.1208

``````````````````````````````````````````````````````````````````````````````

*Step 4b: Form Completion*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|-----|-----|--------|-----|-----|
| -3.0097 | -1.2067 | 0.1276 | 1.1764 | 2.7677 |

Coefficients:

|  | Estimate | Std. Error | t-value | Pr(>|t|) | |
|--|----------|-----------|---------|----------|--|
| (Intercept) | -4.37624 | 2.30765 | -1.896 | 0.0667 | . |
| sex | -0.48758 | 0.61126 | -0.798 | 0.4308 | |
| ses_av | 0.16763 | 0.30063 | 0.558 | 0.5809 | |
| ger_composite | 0.03359 | 0.02072 | 1.621 | 0.1146 | |
| **fc1** | **0.47564** | **0.19252** | **2.471** | **0.0188** | * |

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.697 on 33 degrees of freedom

**Multiple R-squared:  0.255**,    Adjusted R-squared:  0.1647

**F-statistic: 2.824 on 4 and 33 DF,  p-value: 0.04047**

*Compare Step 3 & Step 4*

Analysis of Variance Table

|   | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) |
|---|--------|-----|----|-----------|---|--------|
| 1 | 34 | 112.626 | | | | |
| 2 | 33 | 95.045 | 1 | 17.581 | 6.1042 | 0.01882 * |

$\Delta R^2$ = 0.255-0.1172 = 0.1378

*Step 5b: Figure Ground [= Step 5a]*

Residuals:

| Min | 1Q | Median | 3Q | Max |
|---|---|---|---|---|
| -3.0025 | -1.2059 | 0.1343 | 1.1805 | 2.7708 |

Coefficients:

| | Estimate | Std. Error | t-value | Pr(>\|t\|) | |
|---|---|---|---|---|---|
| (Intercept) | -4.391882 | 2.439913 | -1.8 | 0.0813 | . |
| sex | -0.49193 | 0.648889 | -0.758 | 0.4539 | |
| ses_av | 0.168063 | 0.305861 | 0.549 | 0.5865 | |
| ger_composite | 0.033614 | 0.021073 | 1.595 | 0.1205 | |
| fc1 | 0.474006 | 0.208047 | 2.278 | 0.0295 | * |
| fg1 | 0.003211 | 0.139442 | 0.023 | 0.9818 | |

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.723 on 32 degrees of freedom

Multiple R-squared: 0.255,   Adjusted R-squared: 0.1386

F-statistic: 2.191 on 5 and 32 DF,  p-value: 0.07978

*Compare Step 4 & Step 5*

Analysis of Variance Table

| | Res.Df | RSS | Df | Sum of Sq | F | Pr(>F) | |
|---|---|---|---|---|---|---|---|
| 1 | 33 | 95.045 | | | | | 1 |
| 2 | 32 | 95.043 | 1 | 0.0015751 | $5.00e^{-04}$ | 0.9818 | 2 |

$\Delta R^2$ = 0.255-0.255 = 0

``````````````````````````````````````````````````````````````````````````````````````````````````````````````````

Step 6: Attention Divided

Min	1Q	Median	3Q	Max
-2.9898	-1.2143	0.1247	1.1862	2.749

Coefficients:

	Estimate	Std. Error	t-value	Pr(>|t|)	
(Intercept)	-4.417274	2.516384	-1.755	0.0891	.
sex	-0.491325	0.659316	-0.745	0.4618	

ses_av	0.168902	0.311068	0.543	0.591	
ger_composite	0.033497	0.021501	1.558	0.1294	
fg1	0.001567	0.144415	0.011	0.9914	
fc1	0.473912	0.211371	2.242	0.0323	*
ad_ic2	0.005412	0.092338	0.059	0.9536	

Residual standard error: 1.751 on 31 degrees of freedom

Multiple R-squared: 0.2551,   Adjusted R-squared: 0.1109

F-statistic: 1.769 on 6 and 31 DF, p-value: 0.1382

Compare Step 5 & Step 6

Analysis of Variance Table

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	32	95.043				
2	31	95.033	1	0.010533	0.0034	0.9536

$\Delta R^2 = 0.2551 - 0.255 = 1e^{-04}$