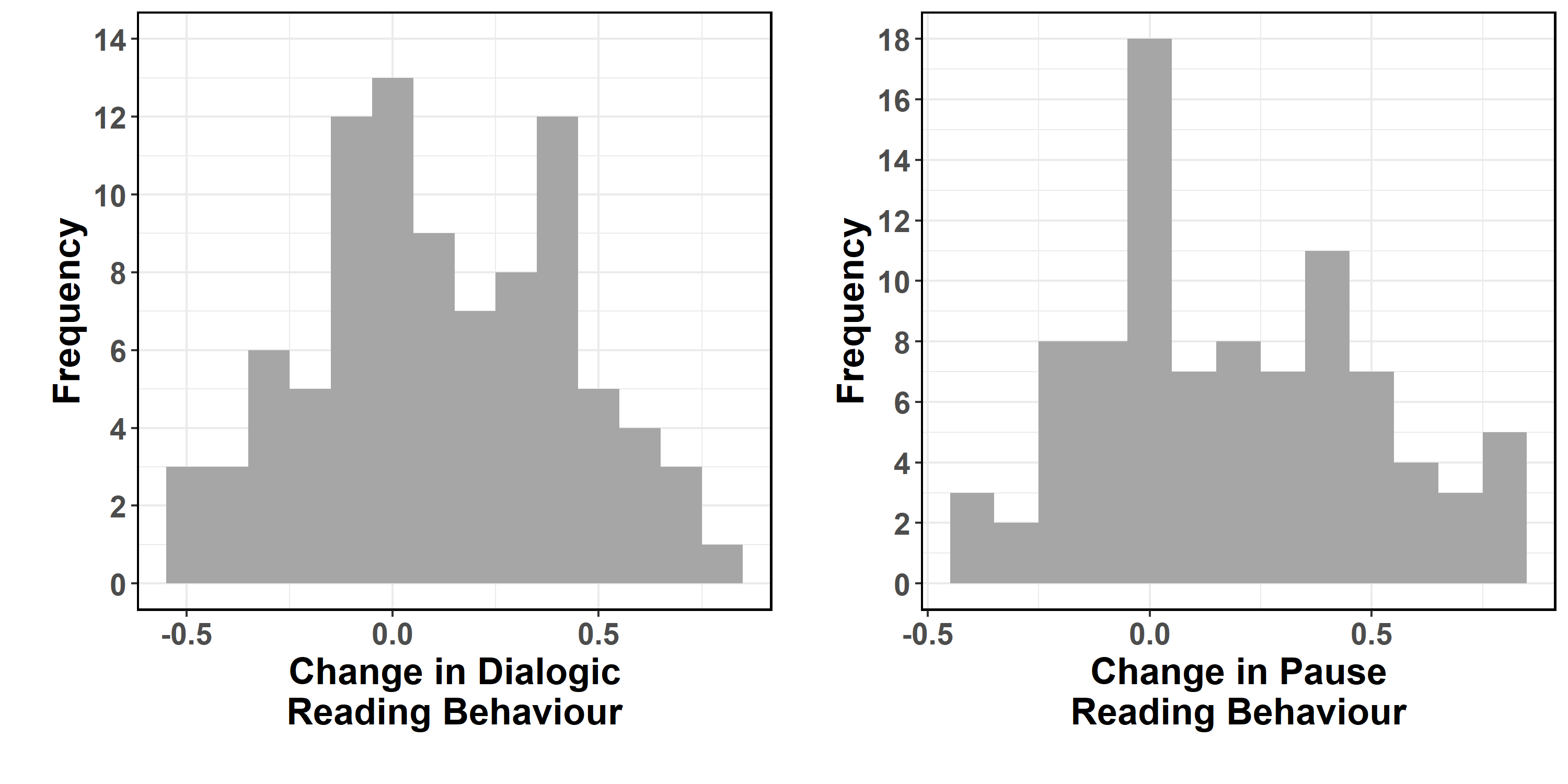
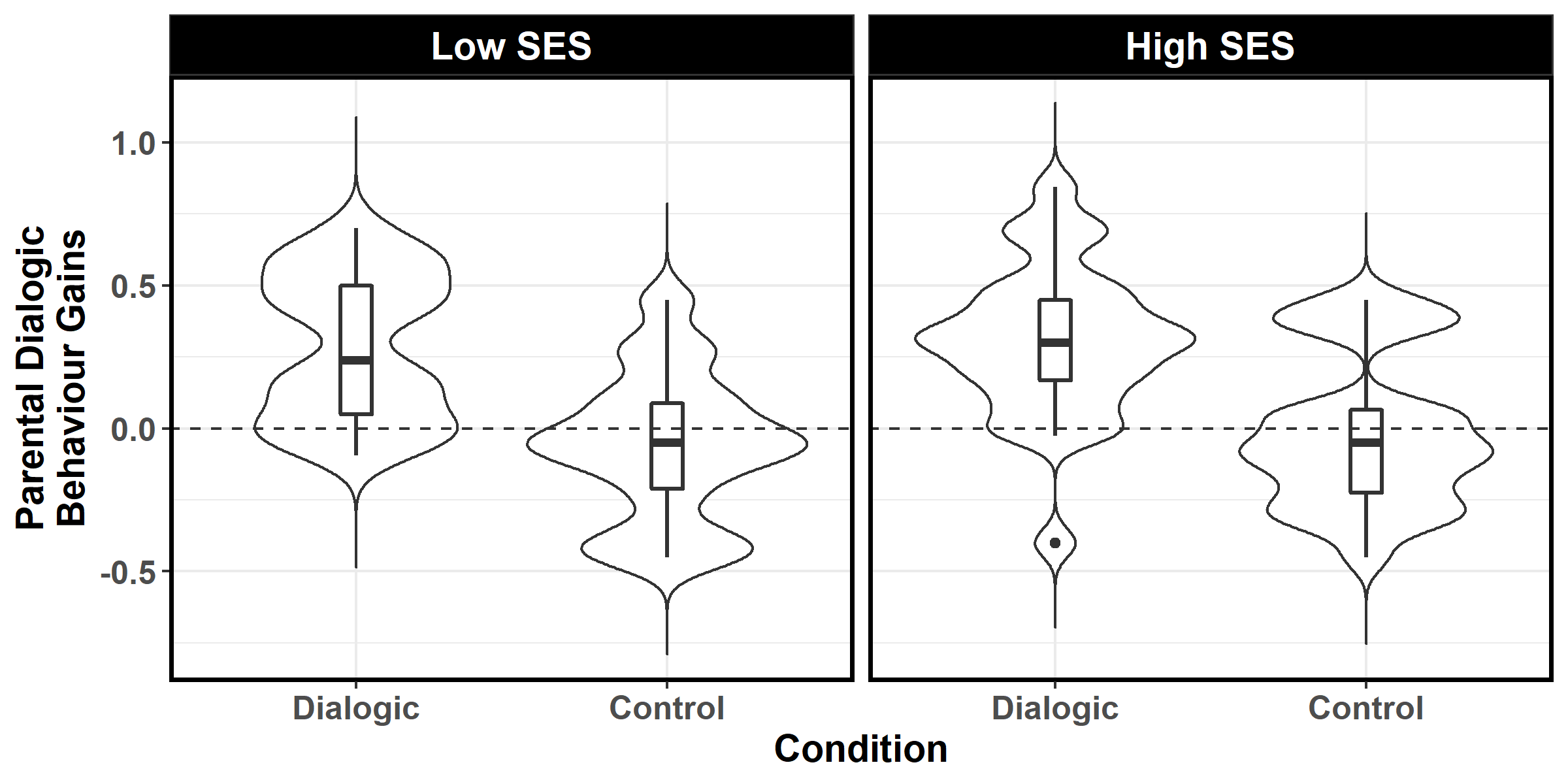
##### Analysis

The data was analysed using linear regression models in *R* version 3.6.0 (R Core Team, 2018).

###### Histograms for Parental Reading Behaviour



###### Violin Plots for Parental Dialogic Reading

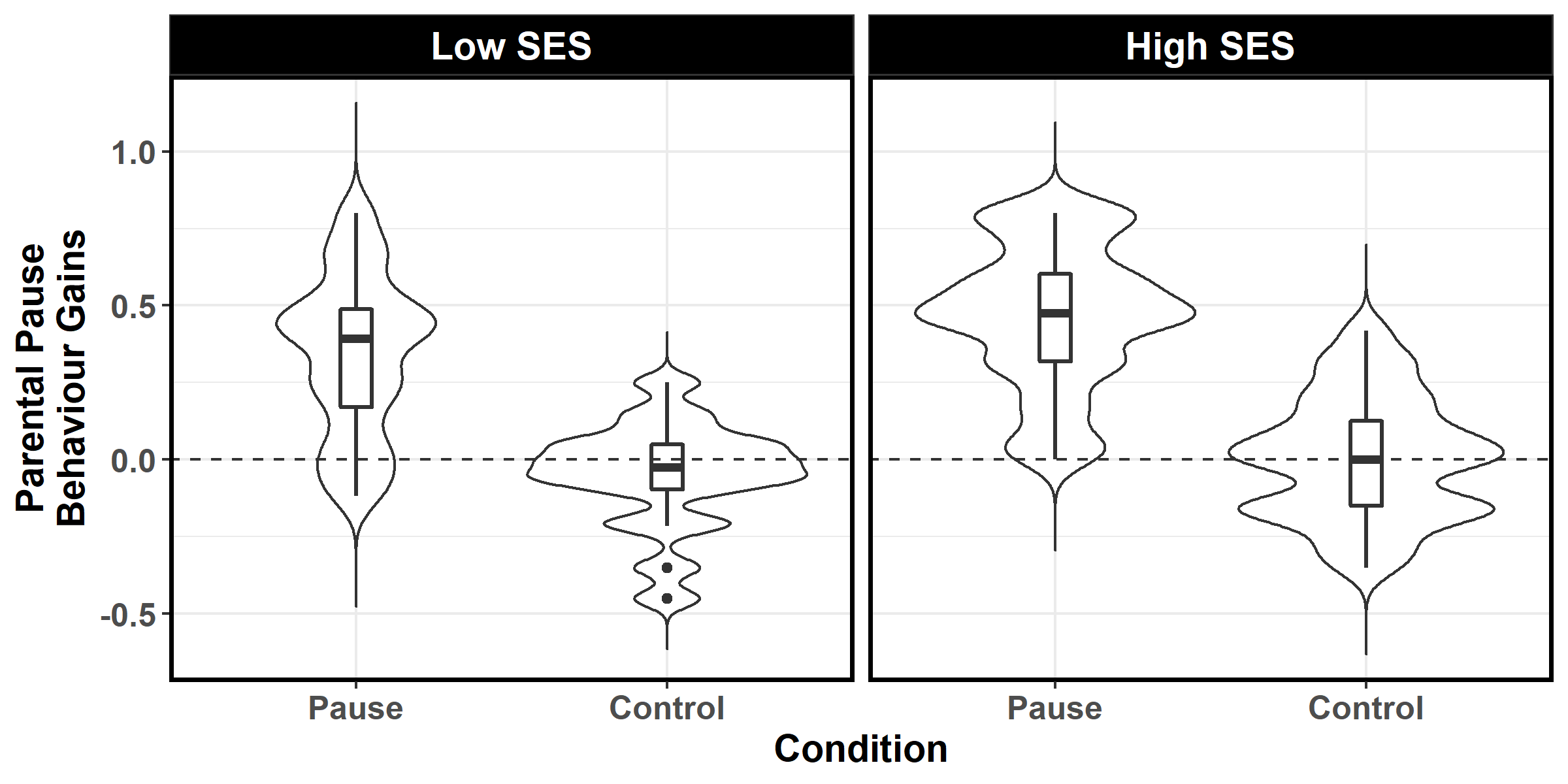


###### Regression Models for Parental Dialogic Reading

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 0.12 [0.09, 0.21] | 0.03 | 3.90 | < .001 |
| Dialogic vs. Control | 0.36 [0.17, 0.41] | 0.06 | 5.97 | < .001 |
| Fidelity | 2.3e-03 [-8.6e-04, 5.1e-03] | 1.5e-03 | 1.52 | .096 |
| SES | 0.03 [-0.09, 0.09] | 0.04 | 0.76 | .449 |
| Pre-Intervention Score | -0.73 [-0.9, -0.56] | 0.09 | -8.40 | < .001 |
| Dialogic vs. Control × Fidelity | -2.6e-03 [-8.4e-03, 3.3e-03] | 3.0e-03 | -0.88 | .304 |
| Dialogic vs. Control × SES | -0.07 [-0.17, 0.18] | 0.09 | -0.76 | .441 |
| Dialogic vs. Control × Pre-Intervention | -0.16 [-0.49, 0.17] | 0.17 | -0.91 | .356 |

F(7, 82) = 16.62 [0.97, 26.84], *p* < .001, *R*2 = 0.5866, *N* = 90

###### Violin Plots for Parental Pause Reading

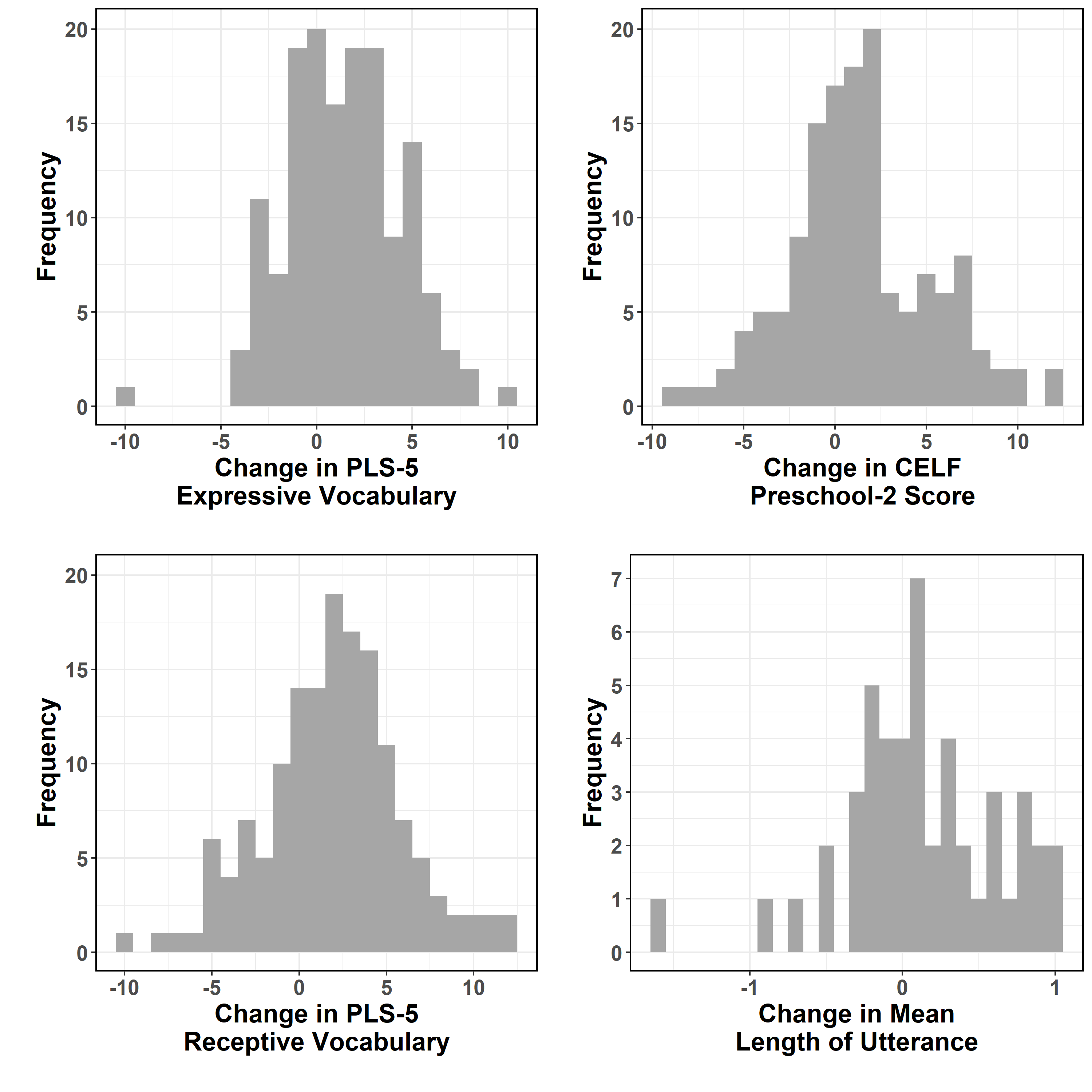


###### Regression Models for Parental Pause Reading

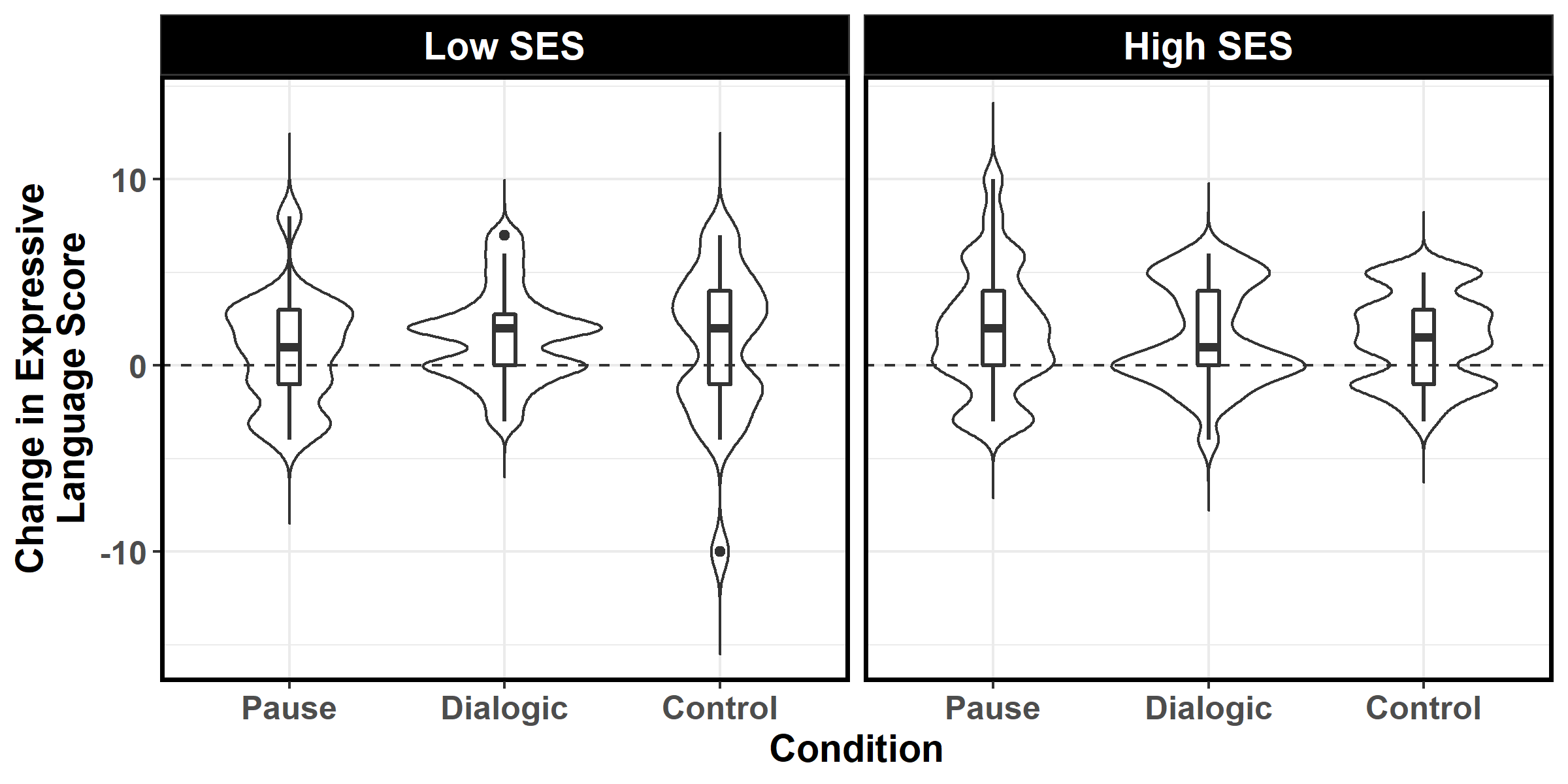
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 0.2 [0.18, 0.32] | 0.04 | 5.57 | < .001 |
| Pause vs. Control | 0.42 [0.29, 0.57] | 0.07 | 5.87 | < .001 |
| Fidelity | -0.3 [-0.58, -0.02] | 0.14 | -2.13 | .034 |
| SES | 0.05 [-0.09, 0.09] | 0.05 | 1.04 | .294 |
| Pre-Intervention Score | 7.6e-04 [-2.6e-03, 4e-03] | 1.7e-03 | 0.45 | .637 |
| Pause vs. Control × Fidelity | 0.56 [0.05, 1.14] | 0.28 | 1.98 | .047 |
| Pause vs. Control × SES | 9.7e-03 [-0.18, 0.19] | 0.09 | 0.10 | .917 |
| Pause vs. Control × Pre-Intervention | -3.6e-03 [-9.9e-03, 3.4e-03] | 3.4e-03 | -1.06 | .267 |

F(7, 82) = 16.76 [3.96, 24.57], *p* < .001, *R*2 = 0.5886, *N* = 90

###### Histograms for the Language Measures



###### Violin Plots for Expressive Vocabulary



###### Regression Models for Expressive Vocabulary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 1.33 [0.83, 2.71] | 0.48 | 2.77 | .007 |
| Pause vs. Dialogic | 0.5 [-1.97, 1.88] | 0.98 | 0.51 | .608 |
| Control vs. Intervention | 0.24 [-1.4, 1.68] | 0.79 | 0.31 | .766 |
| Pre-Intervention Score | -0.1 [-0.22, 0.03] | 0.06 | -1.53 | .124 |
| SES | 0.42 [-1.17, 1.16] | 0.59 | 0.71 | .468 |
| Fidelity | 3.3e-03 [-0.04, 0.04] | 0.02 | 0.16 | .842 |
| Pause vs. Dialogic × Pre-Intervention Score | -0.1 [-0.41, 0.2] | 0.16 | -0.65 | .511 |
| Pause vs. Dialogic × SES | -0.52 [-2.59, 2.65] | 1.34 | -0.39 | .697 |
| Pause vs. Dialogic × Fidelity | 0.03 [-0.04, 0.1] | 0.04 | 0.82 | .394 |
| Control vs. Intervention × Pre-Intervention Score | 0.05 [-0.13, 0.22] | 0.09 | 0.56 | .568 |
| Control vs. Intervention × SES | -0.03 [-1.76, 1.76] | 0.90 | -0.03 | .973 |
| Control vs. Intervention × Fidelity | -8.8e-03 [-0.07, 0.07] | 0.03 | -0.25 | .738 |

F(11, 135) = 0.5 [-1.85, 0.85], *p* = .898, *R*2 = 0.0394, *N* = 147

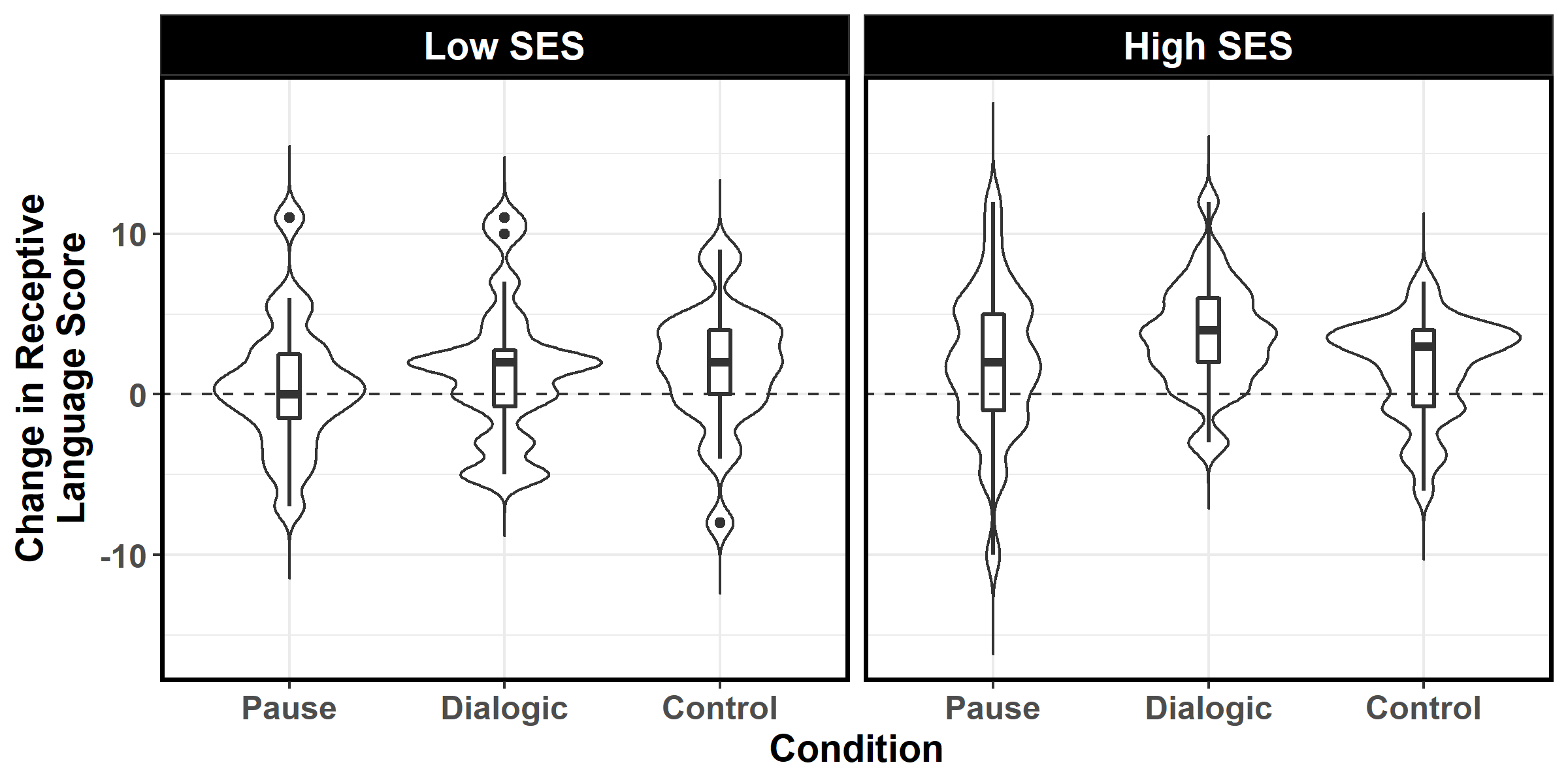
###### Regression Models for Expressive Vocabulary

### Regression Models with Post Intervention Scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 1.31 [0.58, 2.58] | 0.51 | 2.56 | .011 |
| Pause vs. Dialogic | 0.8 [-1.74, 2.37] | 1.05 | 0.76 | .440 |
| Control vs. Intervention | 3.5e-03 [-1.4, 1.81] | 0.82 | 4.2e-03 | .997 |
| Pre-Intervention Score | -0.13 [-0.25, 1.3e-03] | 0.06 | -1.97 | .049 |
| SES | 0.27 [-1.12, 1.1] | 0.57 | 0.48 | .629 |
| Dialogic Score | -4.33 [-7.78, -0.93] | 1.75 | -2.47 | .017 |
| Pause Score | 4.78 [0.94, 8.5] | 1.93 | 2.48 | .015 |
| Pause vs. Dialogic × Pre-Intervention Score | -0.06 [-0.39, 0.25] | 0.16 | -0.37 | .705 |
| Pause vs. Dialogic × SES | -0.48 [-2.52, 2.6] | 1.31 | -0.37 | .721 |
| Pause vs. Dialogic × Dialogic Score | 5.88 [-2.99, 14.27] | 4.40 | 1.33 | .172 |
| Pause vs. Dialogic × Pause Score | -1.31 [-9.39, 7.3] | 4.26 | -0.31 | .754 |
| Control vs. Intervention × Pre-Intervention Score | -9.2e-03 [-0.19, 0.16] | 0.09 | -0.1 | .914 |
| Control vs. Intervention × SES | 0.17 [-1.64, 1.6] | 0.83 | 0.2 | .839 |
| Control vs. Intervention × Dialogic Score | -1.31 [-6.24, 3.44] | 2.47 | -0.53 | .590 |
| Control vs. Intervention × Pause Score | 2.39 [-3.34, 8.48] | 3.01 | 0.79 | .420 |

F(14, 122) = 1.11 [-1.66, 1.5], *p* = .359, *R*2 = 0.1126, *N* = 137

###### Violin Plots for Receptive Vocabulary



###### Regression Models for Receptive Vocabulary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 1.68 [1.7, 3.69] | 0.51 | 3.29 | .002 |
| Pause vs. Dialogic | 1.48 [-0.69, 4.28] | 1.27 | 1.17 | .238 |
| Control vs. Intervention | 0.33 [-0.57, 2.16] | 0.70 | 0.47 | .630 |
| Pre-Intervention Score | -0.2 [-0.33, -0.09] | 0.06 | -3.28 | .001 |
| SES | 1.01 [-1.23, 1.26] | 0.64 | 1.59 | .113 |
| Fidelity | 0.02 [-0.05, 0.07] | 0.03 | 0.55 | .524 |
| Pause vs. Dialogic × Pre-Intervention Score | -6.7e-03 [-0.32, 0.32] | 0.16 | -0.04 | .967 |
| Pause vs. Dialogic × SES | 0.34 [-3.17, 3.22] | 1.63 | 0.21 | .833 |
| Pause vs. Dialogic × Fidelity | 0.04 [-0.07, 0.17] | 0.06 | 0.74 | .460 |
| Control vs. Intervention × Pre-Intervention Score | 0.02 [-0.13, 0.18] | 0.08 | 0.31 | .755 |
| Control vs. Intervention × SES | 0.59 [-1.67, 1.69] | 0.86 | 0.69 | .488 |
| Control vs. Intervention × Fidelity | -0.03 [-0.11, 0.08] | 0.05 | -0.60 | .433 |

F(11, 135) = 1.97 [-1.53, 2.91], *p* = .036, *R*2 = 0.1382, *N* = 147

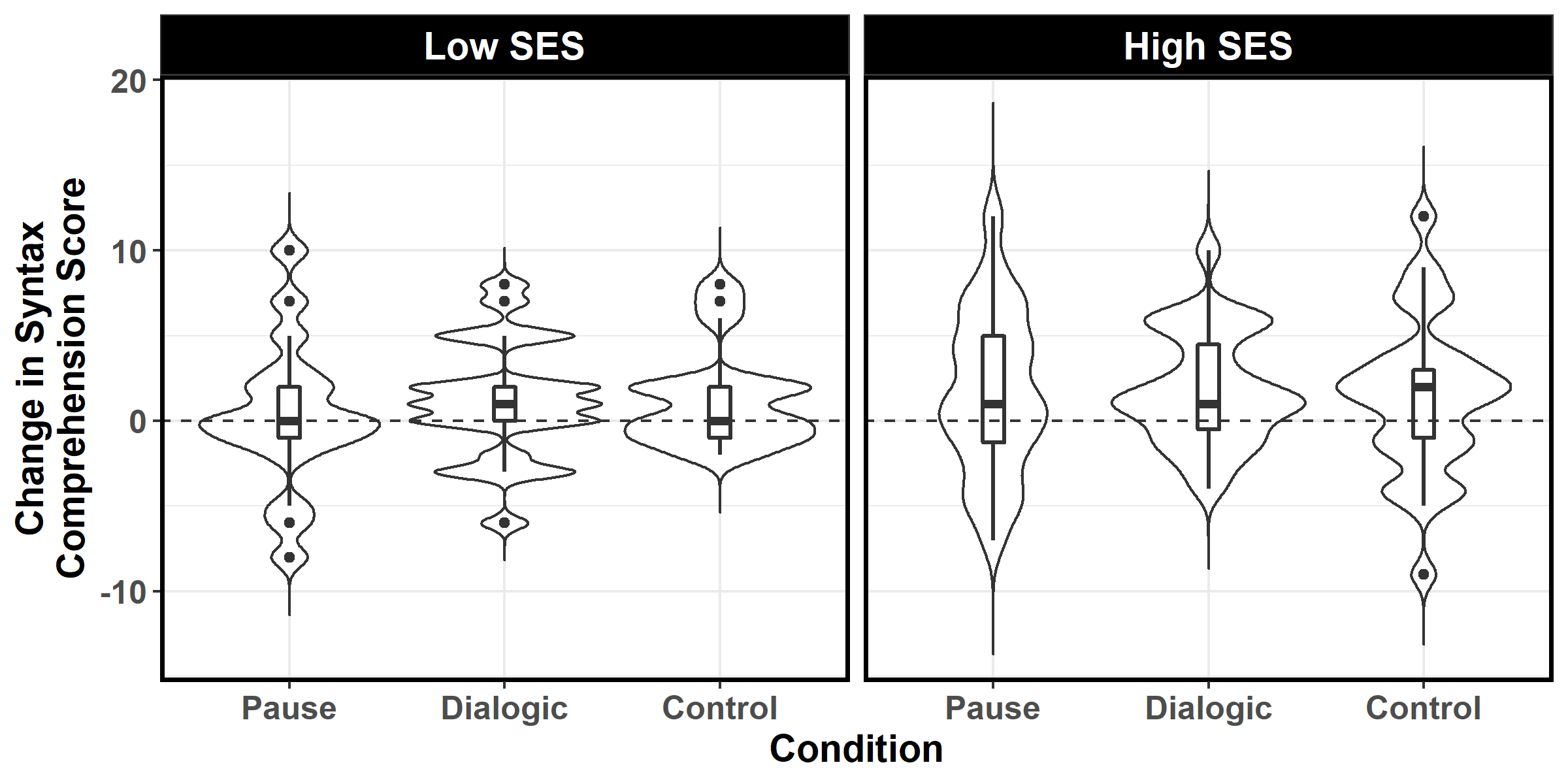
###### Regression Models for Receptive Vocabulary

### Regression Models with Post Intervention Scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 1.65 [1.18, 3.66] | 0.63 | 2.59 | .010 |
| Pause vs. Dialogic | 2.83 [-0.87, 5.62] | 1.66 | 1.71 | .089 |
| Control vs. Intervention | 0.48 [-0.42, 2.78] | 0.81 | 0.58 | .557 |
| Pre-Intervention Score | -0.27 [-0.42, -0.13] | 0.07 | -3.73 | < .001 |
| SES | 0.83 [-1.37, 1.34] | 0.69 | 1.20 | .228 |
| Dialogic Score | -3.08 [-7.81, 2.09] | 2.53 | -1.22 | .214 |
| Pause Score | 2.32 [-2.79, 7.18] | 2.54 | 0.91 | .353 |
| Pause vs. Dialogic × Pre-Intervention Score | -0.02 [-0.42, 0.39] | 0.21 | -0.07 | .942 |
| Pause vs. Dialogic × SES | -0.28 [-3.48, 3.65] | 1.82 | -0.15 | .878 |
| Pause vs. Dialogic × Dialogic Score | -0.46 [-13.15, 14.68] | 7.10 | -0.06 | .943 |
| Pause vs. Dialogic × Pause Score | 1.82 [-12.29, 14.67] | 6.88 | 0.26 | .794 |
| Control vs. Intervention × Pre-Intervention Score | 0.02 [-0.16, 0.19] | 0.09 | 0.23 | .814 |
| Control vs. Intervention × SES | 0.73 [-1.75, 1.72] | 0.89 | 0.83 | .413 |
| Control vs. Intervention × Dialogic Score | -8.15 [-13.33, -1.92] | 2.91 | -2.80 | .007 |
| Control vs. Intervention × Pause Score | 9.2 [2.56, 15.22] | 3.23 | 2.85 | .006 |

F(14, 122) = 1.11 [-1.66, 1.5], *p* = .359, *R*2 = 0.1126, *N* = 137

###### Violin Plots for CELF Scores



###### Regression Models for CELF Scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 1.19 [0.78, 3.07] | 0.59 | 2.04 | .041 |
| Pause vs. Dialogic | 0.87 [-2.17, 3.59] | 1.47 | 0.59 | .546 |
| Control vs. Intervention | 0.18 [-1.38, 1.81] | 0.81 | 0.22 | .820 |
| Pre-Intervention Score | -0.35 [-0.49, -0.21] | 0.07 | -4.75 | < .001 |
| SES | 0.63 [-1.44, 1.42] | 0.73 | 0.86 | .387 |
| Fidelity | 0.04 [-0.07, 0.12] | 0.05 | 0.78 | .445 |
| Pause vs. Dialogic × Pre-Intervention Score | 0.23 [-0.11, 0.56] | 0.17 | 1.33 | .183 |
| Pause vs. Dialogic × SES | -0.16 [-3.71, 3.81] | 1.92 | -0.08 | .934 |
| Pause vs. Dialogic × Fidelity | -0.02 [-0.13, 0.09] | 0.05 | -0.33 | .722 |
| Control vs. Intervention × Pre-Intervention Score | 0.06 [-0.15, 0.27] | 0.11 | 0.60 | .544 |
| Control vs. Intervention × SES | 0.2 [-1.97, 1.81] | 0.96 | 0.21 | .833 |
| Control vs. Intervention × Fidelity | -9.0e-04 [-0.14, 0.21] | 0.09 | -0.01 | .994 |

F(11, 124) = 2.07 [-1.34, 2.97], *p* = .027, *R*2 = 0.1552, *N* = 136

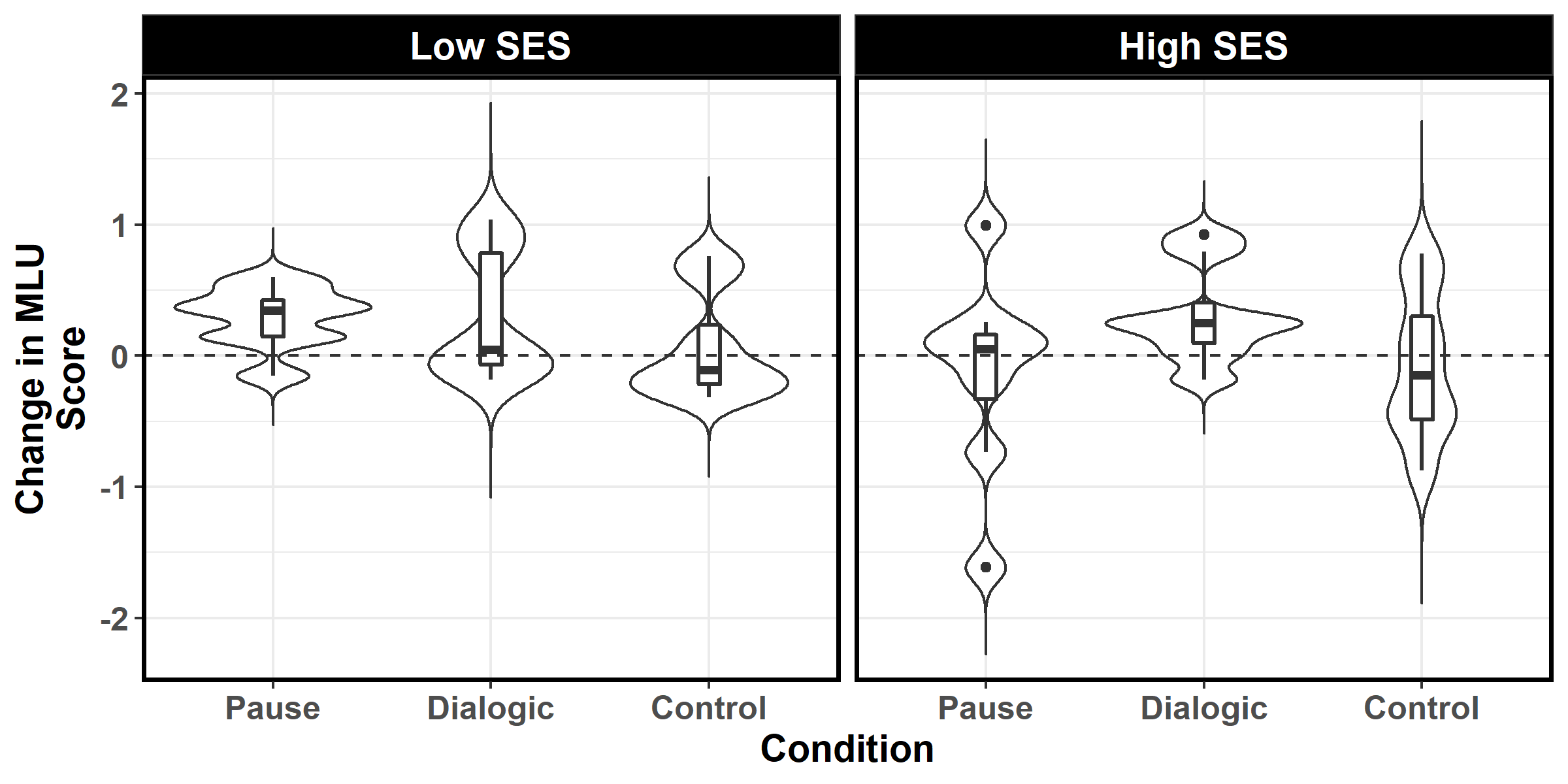
###### Regression Models for CELF Scores

### Regression Models with Post Intervention Scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 0.88 [0.15, 2.74] | 0.66 | 1.33 | .183 |
| Pause vs. Dialogic | 2.04 [-0.95, 4.89] | 1.49 | 1.37 | .169 |
| Control vs. Intervention | -0.5 [-2.02, 1.9] | 1.00 | -0.50 | .612 |
| Pre-Intervention Score | -0.38 [-0.53, -0.22] | 0.08 | -4.87 | < .001 |
| SES | 0.53 [-1.49, 1.47] | 0.76 | 0.70 | .481 |
| Dialogic Score | -1.67 [-6.56, 2.74] | 2.37 | -0.70 | .468 |
| Pause Score | 3.2 [-2.09, 8.65] | 2.74 | 1.17 | .233 |
| Pause vs. Dialogic × Pre-Intervention Score | 0.37 [0.02, 0.73] | 0.18 | 2.04 | .042 |
| Pause vs. Dialogic × SES | -0.22 [-3.68, 3.56] | 1.85 | -0.12 | .907 |
| Pause vs. Dialogic × Dialogic Score | 8.44 [-4.76, 19.57] | 6.21 | 1.36 | .171 |
| Pause vs. Dialogic × Pause Score | -11.9 [-23.23, 0.57] | 6.07 | -1.96 | .050 |
| Control vs. Intervention × Pre-Intervention Score | 0.07 [-0.16, 0.29] | 0.11 | 0.61 | .532 |
| Control vs. Intervention × SES | 0.39 [-2.07, 2.13] | 1.07 | 0.36 | .713 |
| Control vs. Intervention × Dialogic Score | -5.46 [-11.85, 0.46] | 3.14 | -1.74 | .080 |
| Control vs. Intervention × Pause Score | 5.63 [-2.44, 14.26] | 4.26 | 1.32 | .180 |

F(14, 113) = 2.21 [-1.11, 3.08], *p* = .011, *R*2 = 0.2153, *N* = 128

###### Violin Plots for Mean Length of Utterance



###### Regression Models for Mean Length of Utterance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 0.12 [-0.26, 0.38] | 0.16 | 0.75 | .315 |
| Pause vs. Dialogic | 0.26 [-0.2, 1.06] | 0.32 | 0.81 | .342 |
| Control vs. Intervention | 0.13 [-0.44, 0.58] | 0.26 | 0.51 | .444 |
| Pre-Intervention Score | -0.15 [-0.55, 0.26] | 0.21 | -0.74 | .437 |
| SES | -0.07 [-0.4, 0.35] | 0.19 | -0.38 | .678 |
| Fidelity | 6.1e-03 [-0.02, 0.03] | 0.01 | 0.44 | .434 |
| Pause vs. Dialogic × Pre-Intervention Score | 0.3 [-0.67, 1.22] | 0.48 | 0.62 | .494 |
| Pause vs. Dialogic × SES | 0.18 [-0.84, 0.95] | 0.46 | 0.38 | .652 |
| Pause vs. Dialogic × Fidelity | 8.8e-03 [-0.04, 0.06] | 0.02 | 0.36 | .666 |
| Control vs. Intervention × Pre-Intervention Score | -0.04 [-0.75, 0.42] | 0.30 | -0.12 | .919 |
| Control vs. Intervention × SES | -9.4e-03 [-0.46, 0.61] | 0.27 | -0.03 | .969 |
| Control vs. Intervention × Fidelity | 2.2e-03 [-0.05, 0.05] | 0.02 | 0.09 | .822 |

F(11, 35) = 1.1 [-4.18, 2.51], *p* = .388, *R*2 = 0.2574, *N* = 47

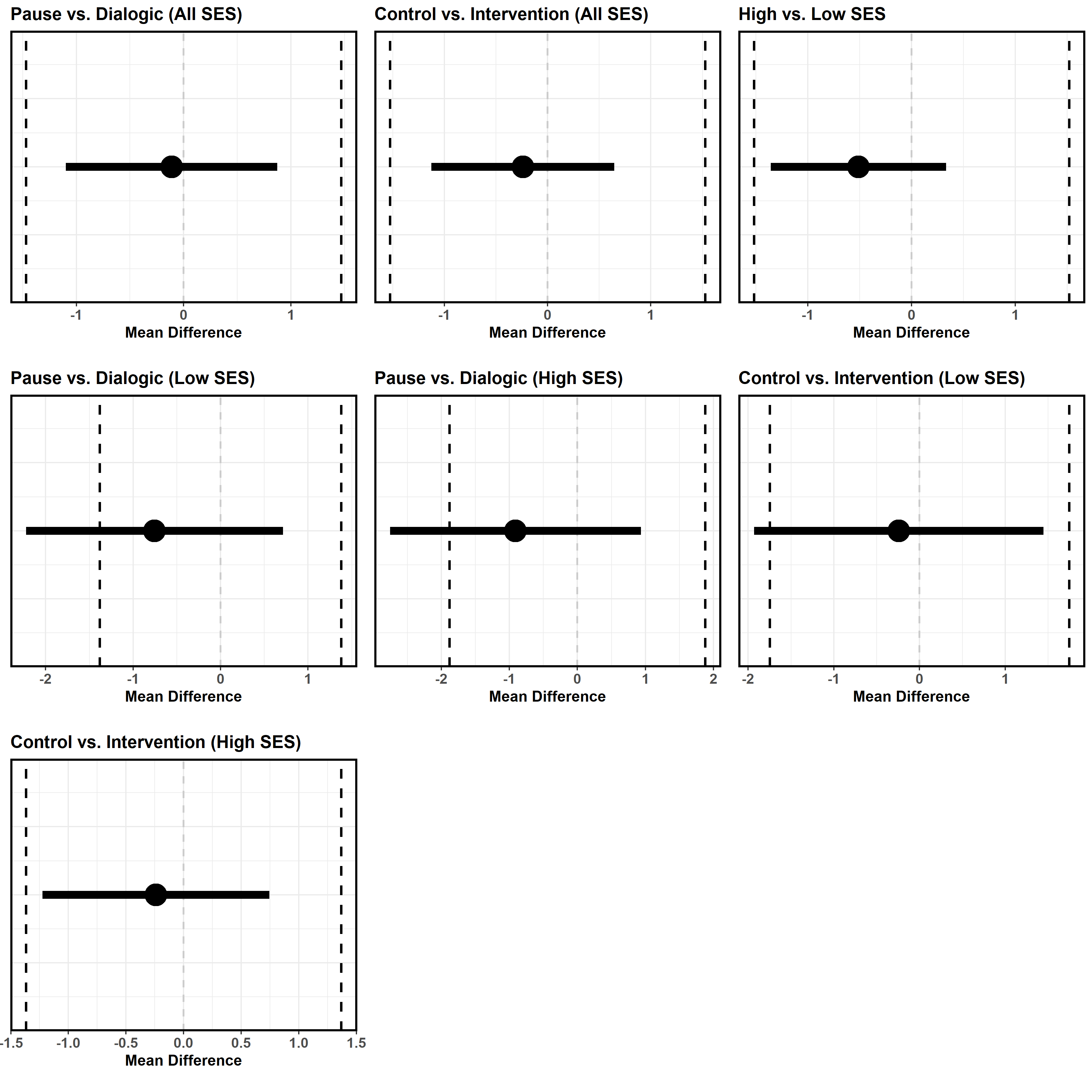
###### Regression Models for Mean Length of Utterance

### Regression Models with Post Intervention Scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | *ß* | *SE* | *t* | *p* |
| Intercept | 0.05 [-0.73, 0.62] | 0.34 | 0.15 | .781 |
| Pause vs. Dialogic | 0.3 [-0.93, 1.68] | 0.67 | 0.45 | .396 |
| Control vs. Intervention | 0.14 [-1.04, 1.19] | 0.57 | 0.25 | .638 |
| Pre-Intervention Score | -0.17 [-0.78, 0.45] | 0.32 | -0.54 | .419 |
| SES | -0.05 [-0.85, 0.91] | 0.45 | -0.11 | .834 |
| Dialogic Score | -0.58 [-3.2, 2.23] | 1.39 | -0.42 | .375 |
| Pause Score | 0.66 [-1.97, 2.79] | 1.21 | 0.55 | .365 |
| Pause vs. Dialogic × Pre-Intervention Score | 0.44 [-1.21, 2.04] | 0.83 | 0.53 | .394 |
| Pause vs. Dialogic × SES | 0.13 [-2.08, 2.27] | 1.11 | 0.12 | .787 |
| Pause vs. Dialogic × Dialogic Score | 0.93 [-4.47, 6.71] | 2.85 | 0.32 | .515 |
| Pause vs. Dialogic × Pause Score | -0.49 [-5.49, 4.19] | 2.47 | -0.20 | .761 |
| Control vs. Intervention × Pre-Intervention Score | -0.02 [-0.91, 0.72] | 0.42 | -0.04 | .959 |
| Control vs. Intervention × SES | -0.11 [-1.27, 1.2] | 0.63 | -0.17 | .749 |
| Control vs. Intervention × Dialogic Score | 0.55 [-3.72, 4.91] | 2.20 | 0.25 | .496 |
| Control vs. Intervention × Pause Score | -0.05 [-3.64, 4.1] | 1.97 | -0.03 | .952 |

F(14, 33) = 0.96 [-4.52, 2.43], *p* = .514, *R*2 = 0.2888, *N* = 48

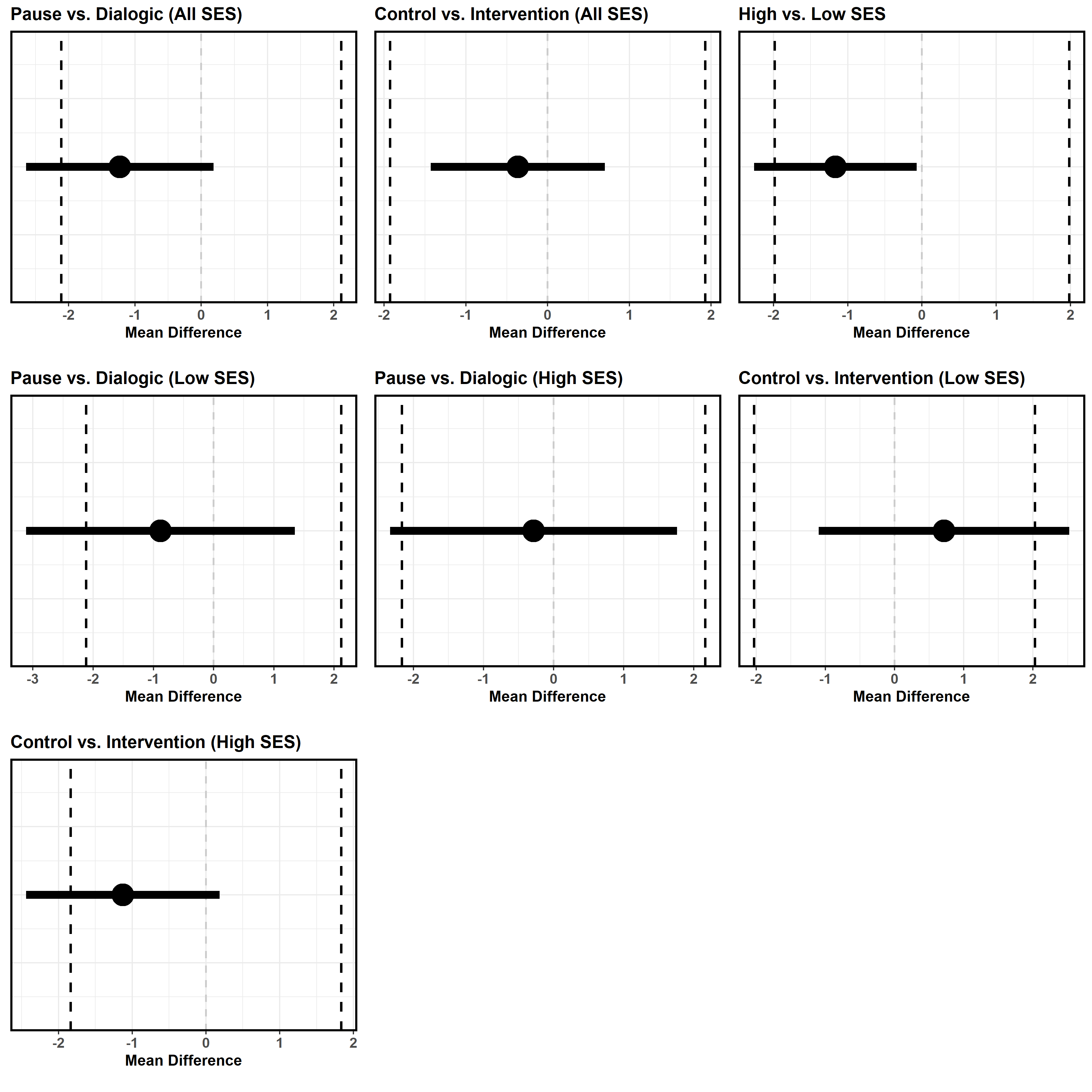
###### Equivalence Tests for Expressive Vocabulary



###### Equivalence Tests for Expressive Vocabulary

|  |  |  |  |
| --- | --- | --- | --- |
| Comparison | t | df | p |
| Pause vs. Dialogic | 2.29 | 90.57 | = .012 |
| Control vs. Intervention | 2.41 | 93.54 | = .009 |
| SES | 1.98 | 119.92 | = .025 |
| Pause vs. Dialogic (Low SES) | 0.72 | 35.28 | = .239 |
| Pause vs. Dialogic (High SES) | 0.89 | 37.66 | = .191 |
| Control vs. Intervention (Low SES) | 1.51 | 29.29 | = .071 |
| Control vs. Intervention (High SES) | 1.91 | 72.24 | = .030 |

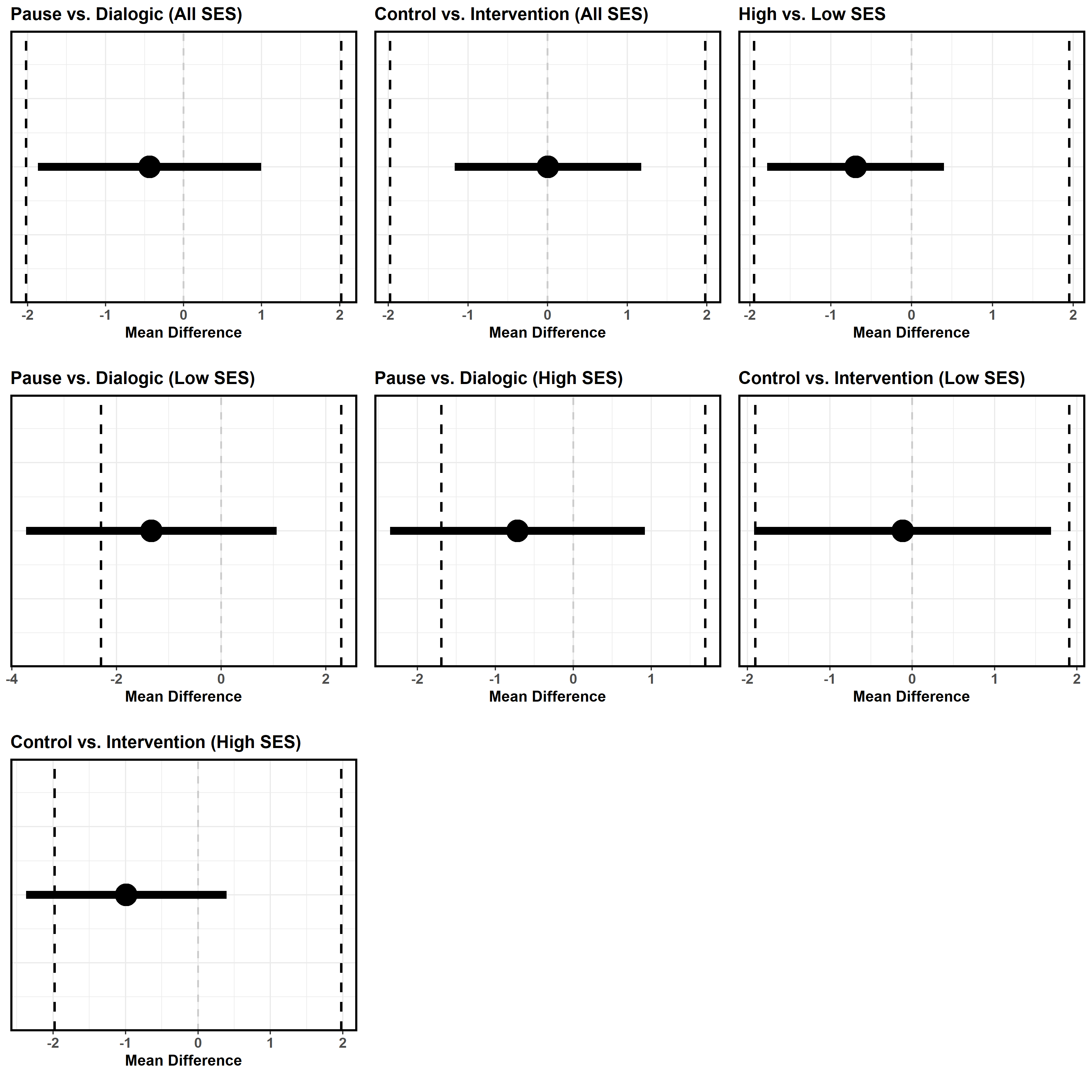
###### Equivalence Test for Receptive Vocabulary



###### Equivalence Tests for Receptive Vocabulary

|  |  |  |  |
| --- | --- | --- | --- |
| Comparison | t | df | p |
| Pause vs. Dialogic | 1.04 | 93.34 | = .152 |
| Control vs. Intervention | 2.44 | 121.25 | = .008 |
| SES | 1.23 | 126.15 | = .110 |
| Pause vs. Dialogic (Low SES) | 0.93 | 38.61 | = .178 |
| Pause vs. Dialogic (High SES) | 1.54 | 47.07 | = .065 |
| Control vs. Intervention (Low SES) | -1.22 | 43.31 | = .114 |
| Control vs. Intervention (High SES) | 0.90 | 74.14 | = .186 |

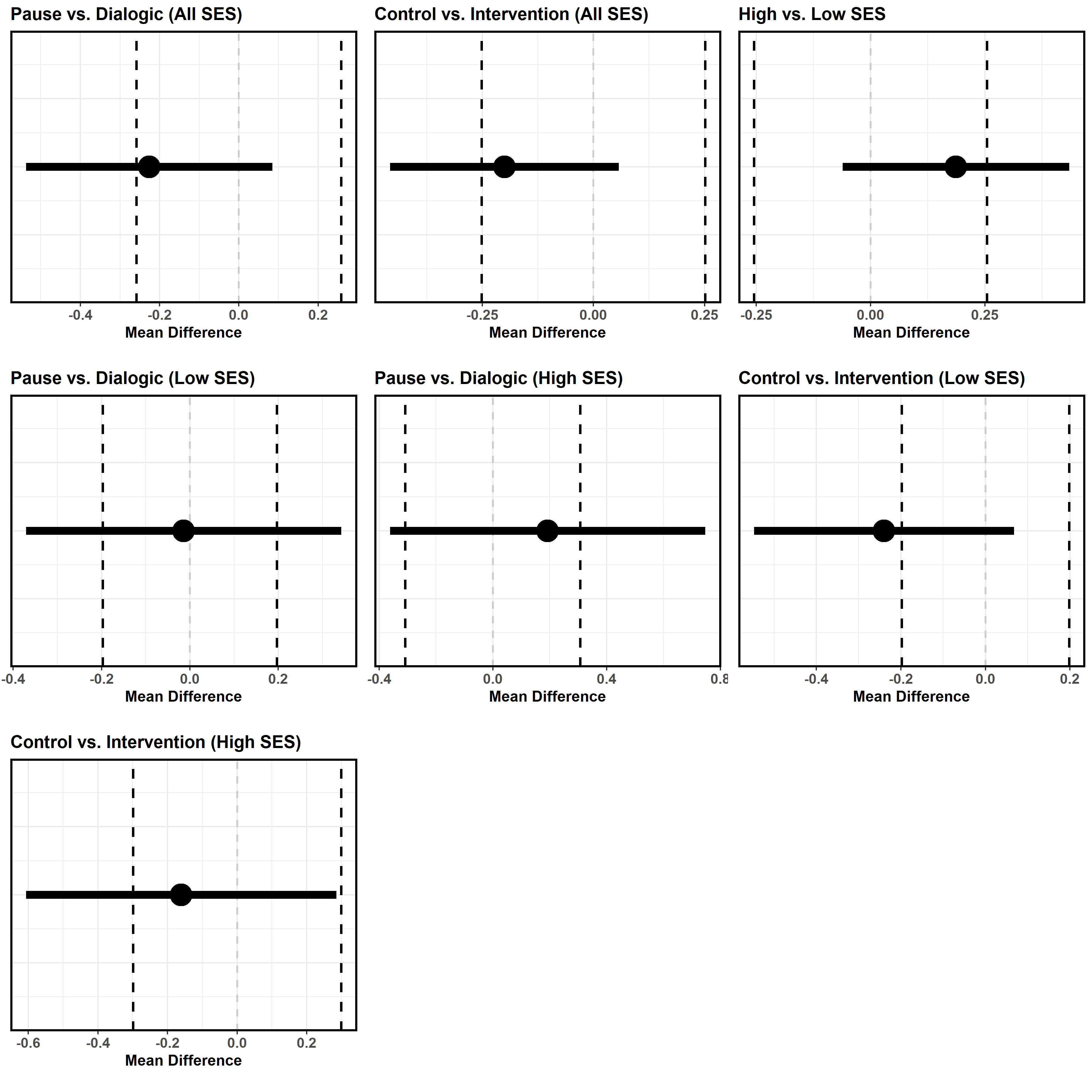
###### Equivalence Tests for CELF Scores



###### Equivalence Tests for CELF Scores

|  |  |  |  |
| --- | --- | --- | --- |
| Comparison | t | df | p |
| Pause vs. Dialogic | 1.84 | 73.81 | = .035 |
| Control vs. Intervention | -2.80 | 96.43 | = .003 |
| SES | 1.90 | 134.60 | = .030 |
| Pause vs. Dialogic (Low SES) | 0.68 | 38.54 | = .251 |
| Pause vs. Dialogic (High SES) | 1.00 | 44.59 | = .160 |
| Control vs. Intervention (Low SES) | 1.67 | 45.99 | = .051 |
| Control vs. Intervention (High SES) | 1.19 | 85.90 | = .119 |

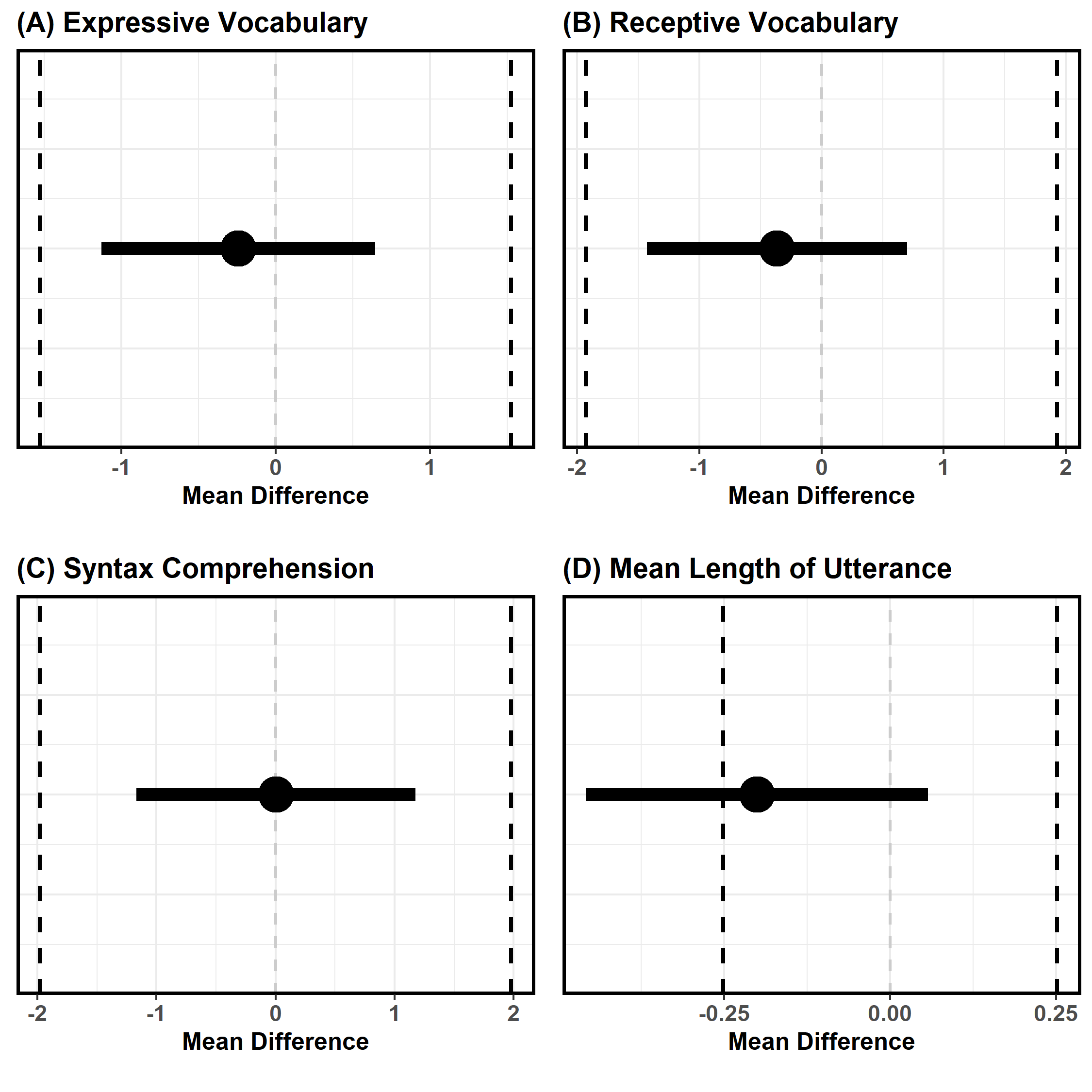
###### Equivalence Tests for MLU



###### Equivalence Tests for MLU

|  |  |  |  |
| --- | --- | --- | --- |
| Comparison | t | df | p |
| Pause vs. Dialogic | 0.17 | 27.33 | = .432 |
| Control vs. Intervention | 0.34 | 32.16 | = .369 |
| SES | -0.46 | 40.01 | = .323 |
| Pause vs. Dialogic (Low SES) | 0.93 | 10.04 | = .188 |
| Pause vs. Dialogic (High SES) | -0.37 | 10.71 | = .358 |
| Control vs. Intervention (Low SES) | -0.24 | 13.14 | = .593 |
| Control vs. Intervention (High SES) | 0.54 | 15.41 | = .298 |

###### Extra Plot



###### Combined Violin Plot

## re-encoding from UTF-8  
## re-encoding from UTF-8

###### References

R Core Team. (2018). *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing.