Table 1. Factor loadings from Orthographic Learning Structural Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Measure  | Unstandardized Loading | Standard Error | Standardized Loading | Z | *p* |
| Orthographic Learning T1 |
| OL I | 1.00 | - | 0.92 | - | - |
| OL D | 0.85 | 0.09 | 0.79 | 10.02 | <.001 |
| OL S | 0.95 | 0.11 | 0.73 | 8.926 | <.001 |
| Orthographic Learning T2 |
| OL I | 1.00 | - | 0.90 | - | - |
| OL D | 0.92 | 0.08 | 0.87 | 11.74 | <.001 |
| OL S | 1.13 | 0.11 | 0.81 | 10.38 | <.001 |
| Word Reading T1 |
| WID | 1.00 |  | 0.95 |  |  |
| WRF | 1.14 | 0.06 | 0.91 | 17.76 | <.001 |
| IRW | 0.49 | 0.02 | 0.96 | 23.24 | <.001 |
| OK L | 0.32 | 0.03 | 0.77 | 11.05 | <.001 |
| OK SL | 0.17 | 0.02 | 0.62 | 7.279 | <.001 |
| Word Reading T2 |
| WID | 1 | - | 0.90 | - | - |
| WRF | 0.84 | 0.06 | 0.87 | 14.95 | <.001 |
| IRW | 0.40 | 0.02 | 0.94 | 19.6 | <.001 |
| OK L | 0.41 | 0.03 | 0.81 | 12.11 | <.001 |
| OK SL | 0.17 | 0.02 | 0.63 | 7.509 | <.001 |

*Notes.* OL = Orthographic Learning Immediate; I = Immediate; D = Delayed; S = Spelling;

WID = Word Identification, WRF = Word Reading Fluency, IWR = Irregular Word Reading, OK L = Orthographic Knowledge Lexical, OK SL = Orthographic Knowledge Sub-Lexical.

Table 2. Intercepts and Means from Orthographic Learning Structural Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| Measure  | Unstandardized Estimate | Standard Error  | Z | *p* |
| PA | 9.723 | 0.429 | 22.685 | <.001 |
| NV | 13.862 | 0.696 | 19.909 | <.001 |
| Age | 101.564 | 0.798 | 127.335 | <.001 |
| WID T1 | -9.304 | 12.199 | -0.763 | 0.446 |
| WRF T1 | -16.43 | 14.008 | -1.173 | 0.241 |
| IRW T1 | -14.347 | 5.953 | -2.41 | 0.016 |
| OK L T1 | 9.874 | 4.284 | 2.305 | 0.021 |
| OK SL T1 | 7.279 | 2.592 | 2.808 | 0.005 |
| OK L T2 | 18.885 | 5.713 | 3.306 | <.001 |
| OK SL T2 | 8.292 | 2.592 | 3.199 | 0.001 |
| WID T2 | -9.304 | 12.199 | -0.763 | 0.446 |
| WRF T2 | 1.419 | 11.223 | 0.126 | 0.899 |
| IRW T2 | -7.867 | 5.22 | -1.507 | 0.132 |
| OL I T1 | -7.031 | 3.444 | -2.042 | 0.041 |
| OL S T1 | -7.552 | 3.525 | -2.142 | 0.032 |
| OL D T1 | -5.16 | 3.1.00 | -1.665 | 0.096 |
| OL I T2 | -0.859 | 2.609 | -0.329 | 0.742 |
| OL S T2 | -3.244 | 3.059 | -1.061 | 0.289 |
| OL D T2 | -0.438 | 2.435 | -0.18 | 0.857 |

*Notes.* PA = Phonological awareness, NV = Non-verbal ability; T1 – Time ; T2 – Time 2; WID = Word Identification, WRF = Word Reading Fluency, IWR = Irregular Word Reading, OK L = Orthographic Knowledge Lexical, OK SL = Orthographic Knowledge Sub-Lexical, OL = Orthographic Learning, I = Initial, S = Spelling, D = Delayed, T = Time,

Table 3. Covariances from the Orthographic Learning Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Measures | UnstandardizedCoefficient | Standard Error | StandardizedCoefficient | Z | *p* |
| NV | <--> | Age | 12.355 | 5.51 | 0.239 | 2.24 | 0.03 |
| Age | <--> | PA | 6.05 | 3.36 | 0.19 | 1.8 | 0.07 |
| NV | <--> | PA | 2.228 | 2.89 | 0.08 | 0.77 | 0.44 |
| WR T1 e | <--> | OL T1 e | 13.761 | 2.96 | 0.616 | 4.65 | <.001 |
| WR T2 e | <--> | OL T2 e | 0.438 | 0.85 | 0.118 | 0.52 | 0.61 |
| WRF T1 | <--> | WRF T2 | 17.14 | 4.77 | 0.468 | 3.6 | <.001 |
| OL S T1 | <--> | OL S T2 | 2.758 | 0.75 | 0.483 | 3.68 | <.001 |
| OK L T1 | <--> | OK L T2 | 4.688 | 1.4 | 0.395 | 3.36 | <.001 |
| OK SL T2 | <--> | OK SL T2 | 1.315 | 0.72 | 0.196 | 1.82 | 0.07 |

*Notes.* PA = Phonological awareness, NV = Non-verbal ability; T1 – Time ; T2 – Time 2; e = error term; WR = Word Reading Latent Factor, WRF = Word Reading Fluency, IWR = Irregular Word Reading, OK L = Orthographic Knowledge Lexical, OK SL = Orthographic Knowledge Sub-Lexical, OL = Orthographic Learning, I = Initial, S = Spelling, D = Delayed, T = Time,