

(handwriting, keyboarding, and spelling) **Executive Functions** (conscious attention, planning, reviewing, revising, strategies for self-regulation)

Figure 1. Berninger's Simple View of Writing (2002). Berninger proposed a developmental neuropsychological model of written expression. Her model distills written expression down to two primary processes: text generation (words, sentences, and discourse) and transcription (handwriting, keyboarding and spelling) with additional emphasis on the role of executive functions (attention, planning, reviewing, revising, and self-regulation).

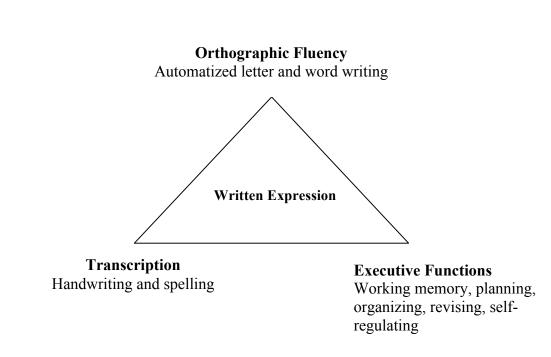


Figure 2. An adaptation of Berninger's Simple View of Writing (2002) for children with TBI. In the current model, greater emphasis is placed on automaticity and fluency of skills as previous research has shown these to be significant mediators between the relation of TBI and WE (Harik et al., 2014). The emphasis on executive processes remains and includes working memory within this grouping as deficits in executive skills, including working memory, are common among children with TBI.

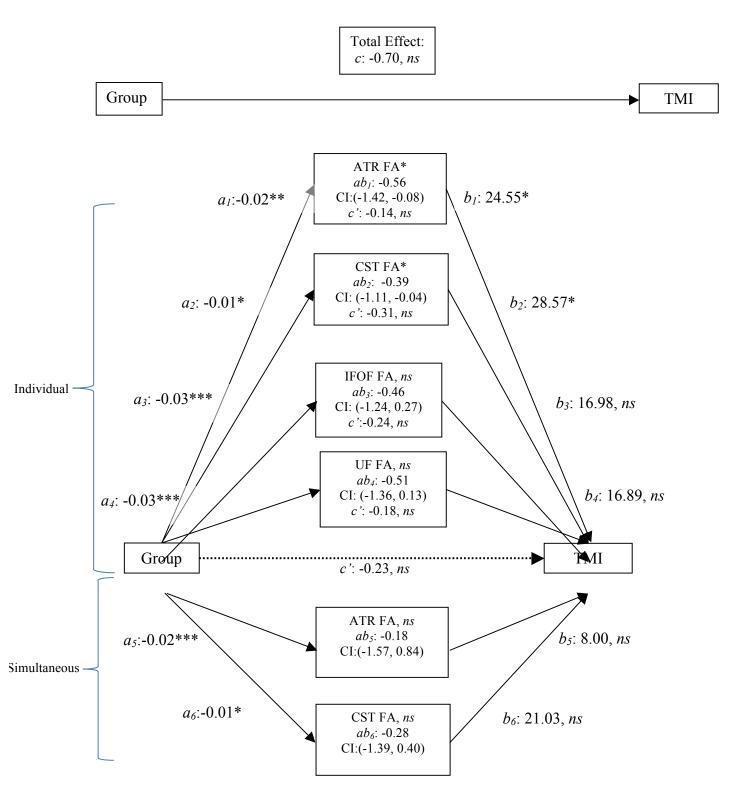


Figure 3. Mediation models showing mediation of the effect of group on TMI standardized score through the impact of group on ATR, CST, IFOF and UF mean FA values entered individually and simultaneously. *A, b,* and *ab* path coefficients are provided. Total (*c*), direct effect (*c'*) and confidence intervals for indirect effects are included for separate and simultaneous models. Results from entering mediators into the model individually are shown in the top half of the model and results of entering significant mediators simultaneously are in the bottom half of the model. When pathway FA was entered individually, ATR and CST showed significant mediation of the relation of group to TMI. When entered simultaneously, this effect dropped out and FA of neither mediated the relation of group to TMI performance above the effect of the other. .* p<.05, **p<.01, ***p<.001.

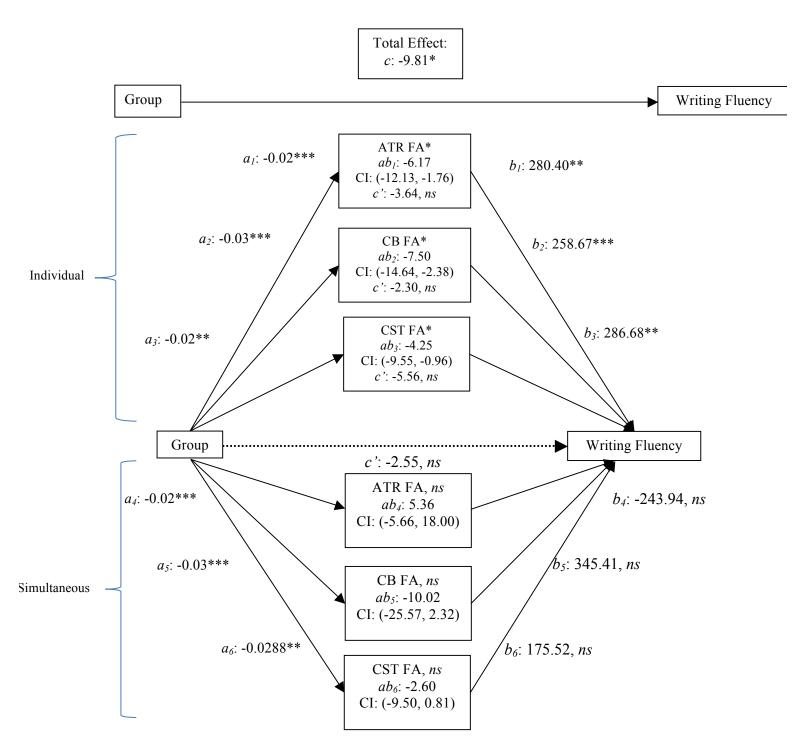


Figure 4. Mediation models showing mediation of the effect of group on the Writing Fluency standardized score through ATR, CB, and CST mean FA values entered individually and simultaneously. *A, b,* and *ab* path coefficients are provided. Total (*c*), direct effect (*c*') and confidence intervals for indirect effects are included for separate and simultaneous models. Results from entering mediators into the model individually are shown in the top half of the model and results of entering significant mediators simultaneously are in the bottom half of the model. When pathway FA was entered individually they each showed significant mediation of the relation of group to Writing Fluency. When entered simultaneously, this effect dropped out and FA of each pathway did not mediate the relation of group to Writing Fluency performance above the effect of the others.* p<.05, **p<.01, ***p<.001.