**Supplementary Information**

***Null Models (Table 3)***

**Adolescent Affect Model**

Level 1 equation: $AA\_{td}= β\_{0d}+ e\_{td}$

Level 2 equation: $β\_{0d}= γ\_{00}+ u\_{0d}$

Mixed model: $AA\_{td}= γ\_{00}+ u\_{0d}+ e\_{td}$

$e\_{td}\~N(0,σ\_{e}^{2}$)

$$u\_{0d}\~N(0, τ\_{00})$$

**Parent Affect Model**

Level 1 equation: $PA\_{td}= β\_{0d}+ e\_{td}$

Level 2 equation: $β\_{0d}= γ\_{00}+ u\_{0d}$

Mixed model: $PA\_{td}= γ\_{00}+ u\_{0d}+ e\_{td}$

$e\_{td}\~N(0,σ\_{e}^{2}$)

$$u\_{0d}\~N(0, τ\_{00})$$

 ***Multilevel Model Predicting Parent Affect (Table 4)***

Level 1 equation: $PA\_{td}= β\_{0d}+ β\_{1}(AA\_{td}-\overbar{AA}\_{.d})+ e\_{td}$

Level 2 equation: $β\_{0d}= γ\_{00}+γ\_{01}\overbar{AA}\_{.d}+u\_{0d}$

 $β\_{1d}$ = $γ\_{10}$ $+ u\_{1d}$

Mixed model: $PA\_{td}= γ\_{00}$ + $γ\_{01}\overbar{AA}\_{.d}$ + $γ\_{10}(AA\_{td}-\overbar{AA}\_{.d})$ +$ u\_{0d}$ $+ u\_{1d}(AA\_{td}-\overbar{AA}\_{.d})$

$e\_{td}\~N(0,σ\_{e}^{2}$)

$$\left[\begin{array}{c}u\_{0d} \\u\_{1d}\end{array}\right]\~N \left(\left[\begin{array}{c}0\\0\end{array}\right],\left[\begin{matrix}τ\_{00}& \\τ\_{10}&τ\_{11}\end{matrix}\right]\right)$$

***Multilevel Model Predicting Parent Affect, Including Interactions (Table 5)***

Level 1 equation: $PA\_{td}= β\_{0d}+ β\_{1}(AA\_{td}-\overbar{AA}\_{.d})+ e\_{td}$

Level 2 equation: $β\_{0d}= γ\_{00}+γ\_{01}\overbar{AA}\_{.d}+γ\_{02}age\_{d}+γ\_{03}intern\_{d}+γ\_{04}extern\_{d}+γ\_{05}age\_{d}\overbar{AA}\_{.d}+γ\_{06}intern\_{d}\overbar{AA}\_{.d}+γ\_{07}extern\_{d}\overbar{AA}\_{.d}+ u\_{0d}$

 $β\_{1d}$ = $γ\_{10}+γ\_{11}age\_{d}+γ\_{12}intern\_{d}+γ\_{13}extern\_{d}+ u\_{1d}$

Mixed model: $PA\_{td}= γ\_{00}$ + $γ\_{01}\overbar{AA}\_{.d}$ $+γ\_{02}age\_{d}$+ $γ\_{03}intern\_{d}+γ\_{04}extern\_{d}+γ\_{05}age\_{d}\overbar{AA}\_{.d}+ γ\_{06}intern\_{d}\overbar{AA}\_{.d}+γ\_{07}extern\_{d}\overbar{AA}\_{.d}+$ $γ\_{10}(AA\_{td}-\overbar{AA}\_{.d})$ + $γ\_{11}age\_{d}(AA\_{td}-\overbar{AA}\_{.d})+γ\_{12}intern\_{d}(AA\_{td}-\overbar{AA}\_{.d})$ + $γ\_{13}extern\_{d}(AA\_{td}-\overbar{AA}\_{.d})+ u\_{0d}$ $+ u\_{1d}(AA\_{td}-\overbar{AA}\_{.d})$

$e\_{d}\~N(0,σ\_{e}^{2}$)

$$\left[\begin{array}{c}u\_{0d} \\u\_{1d}\end{array}\right]\~N \left(\left[\begin{array}{c}0\\0\end{array}\right],\left[\begin{matrix}τ\_{00}& \\τ\_{10}&τ\_{11}\end{matrix}\right]\right)$$