**Supporting Information for review and online publication only**

Table 1: Levels of PRF, Parenting Stress and Child Socio-emotional problems for (a) fathers and mothers and (b) early and late adoptees at 6 months post adoption (T1).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | Fathers | Mothers |  |  | Early Adoptees | Late Adoptees |  |  |
|  | Mean | SD | Mean | SD | t-value | p-value | Mean | SD | Mean | SD | t-value | p-value |
| PRFQ-PM | 1.77 | 0.59 | 1.48 | 0.49 | 2.648 | 0.01 | 1.58 | 0.51 | 1.74 | 0.66 | –1.313 | 0.192 |
| PRFQ-CM | 2.89 | 1.07 | 3.97 | 1.03 | –0.372 | 0.71 | 3.89 | 1.08 | 4.01 | .98 | –0.504 | 0.616 |
| PRFQ-IC | 5.48 | 0.79 | 6.00 | 0.62 | –3.615 | <0.001 | 5.77 | 0.73 | 5.66 | 0.83 | 0.666 | 0.507 |
| PSI-Incompetence | 1.95 | 0.62 | 1.95 | 0.57 | –0.16 | 0.998 | 1.88 | 0.56 | 2.10 | 0.65 | –1.670 | 0.098 |
| PSI-Role Restriction | 2.54 | 0.88 | 2.58 | 1.00 | –0.204 | 0.84 | 2.43 | 0.87 | 2.85 | 1.02 | –2.046 | 0.044 |
| PSI-Social Support | 2.12 | 0.65 | 2.15 | 0.65 | –0.162 | 0.871 | 2.07 | 0.64 | 2.29 | 0.64 | –1.587 | 0.116 |
| PSI-Marital Relationship | 2.05 | 0.74 | 2.18 | 0.70 | –0.897 | 0.372 | 2.00 | 0.71 | 2.39 | 0.68 | –2.484 | 0.015 |
| Child Socio-emotional Problems | –0.27 | 0.98 | -0.50 | 0.77 | 1.218 | 0.226 | –0.58 | 0.73 | 0.04 | 1.04 | –2.889 | 0.006 |

*Note.* N (early adoptees): 66, N (late adoptees): 30, SD = Standard Deviation, PRFQ-PM: Parental Reflective Functioning Questionnaire, subscale Prementalizing Modes, PRFQ-CM: subscale Certainty about mental states child, PRFQ-IC, subscale Interest and Curiosity regarding mental states child, PSI: Parenting Stress Index.

Table 2: Intraclass Correlations of Unconditional Means Models.

|  |  |  |  |
| --- | --- | --- | --- |
|   | Proportion variance 3 levels |   | Proportion variance 2 levels |
| Variable  | Within-person | Within-couple | Between-couple  |   | Within-person | Between-person |
| **Parental Reflective Functioning** |  |  |  |  |  |  |
| Prementalizing Modes | 0.49 | 0.43 | 0.08 |  | 0.49 | 0.51 |
| Certainty of Child Mental States | 0.32 | 0.39 | 0.29 |  | 0.32 | 0.68 |
| Interest and Curiosity in Child Mental states  | 0.43 | 0.57 | 0.00 |  | 0.43 | 0.57 |
|  |  |  |  |  |  |  |
| **Child Socio-Emotional Problems** | 0.60 | 0.08 | 0.33 |  |  |  |
|  |  |  |  |  |  |  |
| **Parenting Stress** |  |  |  |  |  |  |
| Incompetence | 0.44 | 0.31 | 0.26 |  |  |  |
| Role Restriction | 0.37 | 0.21 | 0.42 |  |  |  |
| Marital Relationship  | 0.50 | 0.20 | 0.30 |  |  |  |
| Social Isolation  | 0.43 | 0.32 | 0.26 |   |   |   |

*Note*: Child Socio-emotional Problems as measured using the BITSEA problem score and the CBCL Total Score

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PRFQ-PM T1 | PRFQ-PM T2 | PRFQ-PM T3 | PRFQ-PM T3 | PRFQ-PM T5 |
| PRFQ-PM T1 | -- | 0.584\*\* | 0.470\*\* | 0.448\*\* | 0.420\*\* |
| PRFQ-PM T2 | *0.699\*\** | -- | 0.607\*\* | 0.749\*\* | 0.512\*\* |
| PRFQ-PM T3 | *0.663\*\** | *0.523\*\** | -- | 0.684\*\* | 0.731\*\* |
| PRFQ-PM T3 | *0.281* | *0.182* | *0.401\*\** | -- | 0.573\*\* |
| PRFQ-PM T5 | *0.648\*\** | *0.438\*\** | *0.586\*\** | *0.624\*\** | -- |
| *Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*). |

Table 3. Correlations of PRFQ-PM scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

Table 4. Correlations of PRFQ-CM scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PRFQ-CM T1 | PRFQ-CM T2 | PRFQ-CM T3 | PRFQ-CM T3 | PRFQ-CM T5 |
| PRFQ-CM T1 | -- | 0.812\*\* | 0.686\*\* | 0.629\*\* | 0.688\*\* |
| PRFQ-CM T2 | *0.730\*\** | -- | 0.760\*\* | 0.699\*\* | 0.684\*\* |
| PRFQ-CM T3 | *0.658\*\** | *0.848\*\** | -- | 0.737\*\* | 0.678\*\* |
| PRFQ-CM T3 | *0.626\*\** | *0.726\*\** | *0.845\*\** | -- | 0.75\*\* |
| PRFQ-CM T5 | *0.609\*\** | *0.545\*\** | *0.743\*\** | *0.762\*\** | -- |
| *Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*). |

Table 5. Correlations of PRFQ-IC scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PRFQ-IC T1 | PRFQ-IC T2 | PRFQ-IC T3 | PRFQ-IC T3 | PRFQ-IC T5 |
| PRFQ-IC T1 | -- | 0.687\*\* | 0.444\*\* | 0.562\*\* | 0.460\*\* |
| PRFQ-IC T2 | *0.659\*\** | -- | 0.493\*\* | 0.550\*\* | 0.378\* |
| PRFQ-IC T3 | *0.399\*\** | *0.461\*\** | -- | 0.592\*\* | 0.521\*\* |
| PRFQ-IC T3 | *0.557\*\** | *0.656\*\** | *0.645\*\** | -- | 0.477\*\* |
| PRFQ-IC T5 | *0.472\*\** | *0.513\*\** | *0.380\** | *0.554\** | -- |
| *Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*). |

Table 6. Correlations of PSI-Competence scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PSI CompT1 | PSI CompT2 | PSI CompT3 | PSI CompT4 | PSI CompT5 |
| PSI Competence T1 | -- | 0.844\*\* | 0.674\*\* | 0.605\*\* | 0.499\*\* |
| PSI Competence T2 | *0.547\*\** | -- | 0.729\*\* | 0.783\*\* | 0.579\*\* |
| PSI Competence T3 | *0.670\*\** | *0.627\*\** | -- | 0.719\*\* | 0.694\*\* |
| PSI Competence T4 | *0.326\** | *0.276* | *0.692\*\** | -- | 0.760\*\* |
| PSI Competence T5 | *0.318\** | *0.395\** | *0.613\*\** | *0.779\*\** | -- |

*Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*).

Table 7. Correlations of PSI-Role restriction scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PSI Role restriction T1 | PSI Role restriction T2 | PSI Role restriction T3 | PSI Role restriction T4 | PSI Role restriction T5 |
| PSI Role restriction T1 | -- | 0.720\*\* | 0.729\*\* | 0.677\*\* | 0.556\*\* |
| PSI Role restriction T2 | *0.627\*\** | -- | 0.681\*\* | 0.694\*\* | 0.554\*\* |
| PSI Role restriction T3 | *0.637\*\** | *0.728\*\** | -- | 0.735\*\* | 0.711\*\* |
| PSI Role restriction T4 | *0.477\*\** | *0.560\*\** | *0.792\*\** | -- | 0.72\*\* |
| PSI Role restriction T5 | *0.543\*\** | *0.709\*\** | *0.766\*\** | *0.792\*\** | -- |

*Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*).

Table 8. Correlations of PSI-Social Isolation scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | PSI Social isolation T1 | PSI Social isolation T2 | PSI Social isolation T3 | PSI Social isolation T4 | PSI Social isolation T5 |
| PSI Social isolation T1 | -- | 0.762\*\* | 0.620\*\* | 0.474\*\* | 0.457\*\* |
| PSI Social isolation T2 | *0.592\*\** | -- | 0.602\*\* | 0.703\*\* | 0.715\*\* |
| PSI Social isolation T3 | *0.678\*\** | *0.636\*\** | -- | 0.655\*\* | 0.704\*\* |
| PSI Social isolation T4 | *0.496\*\** | *0.540\*\** | *0.644\*\** | -- | 0.758\*\* |
| PSI Social isolation T5 | *0.397\** | *0.364\** | *0.571\*\** | *0.507\*\** | -- |

*Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*).

Table 9. Correlations of PSI-Marital Relationship scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | PSI Marital Relationship T1 | PSI Marital Relationship T2 | PSI Marital Relationship T3 | PSI Marital Relationship T4 | PSI Marital Relationship T5 |
| PSI Marital Relationship T1 | -- | 0.657\*\* | 0.667\*\* | 0.492\*\* | 0.558\*\* |
| PSI Marital Relationship T2 | *0.512\*\** | -- | 0.678\*\* | 0.621\*\* | 0.612\*\* |
| PSI Marital Relationship T3 | *0.590\*\** | *0.594\*\** | -- | 0.577\*\* | 0.640\*\* |
| PSI Marital Relationship T4 | *0.423\*\** | *0.268* | *0.616\*\** | -- | 0.672\*\* |
| PSI Marital Relationship T5 | *0.356\** | *0.185* | *0.207* | *0.401\** | -- |

*Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*).

Table 10. Correlations of child socio-emotional problem scores between T1-T5 for mothers and fathers (above diagonal: fathers, below diagonal: mothers).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | Socio-emotionalproblems T1 | Socio-emotionalproblems T2 | Socio-emotionalproblems T3 | Socio-emotionalproblems T4 | Socio-emotionalproblems T5 |
| Socio-emotional problems T1 | -- | 0.521\*\* | 0.406\*\* | 0.185 | 0.423\* |
| Socio-emotional problems T2 | *0.498\*\** | -- | 0.563\*\* | 0.529\*\* | 0.581\*\* |
| Socio-emotional problems T3 | *0.354\** | *0.434\*\** | -- | 0.406\* | 0.620\*\* |
| Socio-emotional problems T4 | *0.086* | *0.082* | *0.736\*\** | -- | 0.563\*\* |
| Socio-emotional problems T5 | *0.211* | *0.338\** | *0.675\*\** | *0.770\*\** | -- |

*Note*. Correlation is significant at the 0.01 level (\*\*), 0.05 level (\*).

Table 11. Multilevel growth models for PRF Prementalizing Modes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Model 1:** | **Model 2:** | **Model 3:** | **Model 4:** |
| **UGM** | **Time+Time²** | **Time x Sex Parent +Time²**  | **Time x Sex Parent x Age Adoption + Time²**  |
|   | *Estimate* | *CI* | *P* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* |
| *(SE)* | *(SE)* | *(SE)* | *(SE)* |
| *Initial Status* |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 1.59 (0.07) | 1.44; 1.73 | **<0.001** | 1.65 (0.08) | 1.50; 1.80 | **<0.001** | 1.72 (0.11) | 1.52; 1.93 | **<0.001** | 1.49 (0.12) | 1.26; 1.72 | **<0.001** |
| Sex Parent | **-**  | **-**  | –0.15 (0.14) | –0.43; 0.14 | 0.313 | 0.10 (0.16)  | –0.22; -0.41 | 0.675 |
| Child Age at Adoption | **-**  | **-**  | **-**  | 0.76 (0.21) | 0.35; 1.16 | **<0.001** |
| Sex Parent X Age Adoption | **-**  | **-**  | **-**  | –0.80 (0.29) | –1.36; -0.23 | **0.006** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Rate of Change* |  |  |  |  |  |  |  |  |  |  |  |  |
| Time  | 0.004 (0.02) | –0.03; 0.04 | 0.846 | 0.12 (0.05) | 0.02 ; 0.21 | **0.015** | 0.11 (0.05) | 0.01; 0.21 | **0.038** | 0.06 (0.05) | –0.04; 0.17 | 0.241 |
| Time X Sex Parent | **-**  | **-**  | 0.02 (0.04) | –0.06; 0.09 | 0.632 | 0.08 (0.04) | –0.01; 0.16 | *0.076* |
| Time X Age Adoption | **-**  | **-**  | **-**  | 0.15 | 0.04; 0.26 | **0.008** |
| Time X Sex X Age Adoption | **-**  | **-**  | **-**  | –0.19 | –0.34; -0.04 | **0.014** |
| Time²  | **-**  | 0.03 (0.01) | 0.01 ; 0.05 | **0.01** | 0.03 (0.01) | 0.01; 0.05 | **0.011** | 0.03 | 0.01; 0.05 | 0.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Variance Components* |  |  |  |  |  |  |  |  |
| Within Parent  | 0.14 | 0.14 | 0.14 | 0.14 |
| Between Parents (initial status)  | 0.38 | 0.38 | 0.38 | 0.31 |
| Between Parents (rate of change)  | 0.02 | 0.02 | 0.02 | 0.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Deviance* | 626.45 | 619.99 | 614.96 | 601.821 |
| *LRT (Mn-1 -Mn)* | -  | 6.46, df = 1, p = 0.01 | 5.03, df=2, p=0.08 | 13.16, df=4, p=0.011 |

*Note.* UGM = Unconditional Growth Model, SE = standard error, CI = Confidence Interval (95%), LRT= Likelihood Ratio Test (χ2)

\*We have also tested the interaction between Time² and the Level-2 parameters in other models, but as these did not yield significant results, we have omitted them here for parsimony.

Table 12: Multilevel Growth Models for PRF Certainty of Mental States Child

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Model 1:** | **Model 2:** | **Model 3:** | **Model 4:** |
|  **UGM** |  **Time x Sex Parent** | **Time x Sex Parent x Child Age at Adoption** | **Time x Child Age at Adoption** |
|   | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* |
| *(SE)* | *(SE)* | *(SE)* | *(SE)* |
| *Initial Status* |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 4.44 (0.11) | 4.22; 4.66 | **<0.001** | 4.38 (0.16) | 4.06; 4.70 | **<0.001** | 4.49 (0.19) | 4.11; 4.86 | **<0.001** | 4.54 (0.14) | 4.28; 4.81 | **<0.001** |
| Sex Parent | - | 0.12 (0.23) | –0.32; 0.56 | 0.59 | 0.12 (0.27) | –0.41; 0.65 | 0.662 | - |
| Child Age at Adoption | - | - | –0.34 (0.35) | –1.03; 0.34 | 0.328 | –0.34 (0.24) | –0.81; 0.14 | 0.17 |
| Sex Parent X Age Adoption | - | - | 0.01 (0.49) | –0.95; 0.96 | 0.992 | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Rate of Change* |  |  |  |  |  |  |  |  |  |  |  |  |
| Time  | 0.14 (0.03) | 0.09 ; 0.18 | **<0.001** | 0.13 (0.04) | 0.06; 0.20 | **<0.001** | 0.17 (0.04) | 0.09; 0.25 | **<0.001** | 0.17 (0.03) | 0.11; 0.23 | **<0.001** |
| Time X Sex Parent | - | 0.004 (0.05) | –0.09; 0.10 | 0.935 | –0.01 (0.06) | –0.12; 0.11 | 0.925 | - |
| Time X Age Adoption | - | - | –0.13 (0.07) | –0.28; 0.01 | *0.077* | –0.12 (0.05) | –0.22; –0.01 | **0.027** |
| Time X Sex X Age Adoption | - | - | 0.03 (0.10) | –0.17; 0.24 | 0.752 | - |
| Time²  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Variance Components* | 0.28 | 0.28 | 0.28 | 0.28 |
| Within Parent  | 0.99 | 0.99 | 0.97 | 0.97 |
| Between Parents (initial status)  | 0.02 | 0.02 | 0.02 | 0.02 |
| Between Parents (rate of change)  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Deviance* | 992.713 | 992.38 | 987.275 | 987.737 |
| *LRT (Mn-1 -Mn)* | - | 0.33. df = 2. p = 0.85 | 5.11. df = 4. p = 0.28 | 4.98. df = 2. p = 0.08 |

*Note.* UGM = Unconditional Growth Model, SE = standard error, CI = Confidence Interval (95%), LRT= Likelihood Ratio Test (χ2)

Table 13: Multilevel Growth Models for Interest and Curiosity in Child Mental States

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Model 1:** **UGM** | **Model 2:** **TIME x SEX PARENT** | **Model 3:** **TIME x SEX x AGE CAT** |
| *Initial Status* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* |
| *(SE)* | *(SE)* | *(SE)* |
| Intercept |  |  |  |  |  |  |  |  |  |
| Sex Parent | 5.58 (0.08) | 5.42; 5.73 | **<0.001** | 5.26 (0.10) | 5.05; 5.46 | **<0.001** | 5.28 (0.12) | 5.03; 5.52 | **<0.001** |
| Child Age at Adoption | -  | 0.62 (0.15) | 0.34; 0.91 | **<0.001** | 0.53 (0.18) | 0.19; 0.88 | **0.003** |
| Sex Parent X Age Adoption | -  | -  | –0.06 (0.23) | –0.50; 0.39 | 0.801 |
|  | -  | -  | 0.29 (0.32) | –0.33; 0.91 | 0.357 |
| *Rate of Change* |  |  |  |  |  |  |  |  |  |
| Time  | –0.04 (0.02) | -0.08; -0.00 | **0.047** | –0.06 (0.03) | -0.12; -0.01 | **0.022** | –0.07 (0.03) | –0.14; –0.01 | **0.024** |
| Time X Sex Parent | -  | 0.05 (0.04) | –0.03; 0.12 | 0.226 | 0.03 (0.05) | –0.06; 0.12 | 0.469 |
| Time X Age Adoption | -  | -  | 0.04 (0.06) | –0.08; 0.15 | 0.546 |
| Time X Sex X Age Adoption | -  | -  | 0.04 (0.08) | –0.12; 0.20 | 0.617 |
| Time²  | -  | -  | -  |
|  |  |  |  |  |  |  |  |  |  |
| *Variance Components* |  |  |  |  |  |  |  |  |  |
| Within Parent  | 0.23 | 0.23 | 0.23 |
| Between Parents (initial status)  | 0.42 | 0.33 | 0.33 |
| Between Parents (rate of change)  | 0.01 | 0.01 | 0.01 |
| *Model fit indices* |  |  |  |  |  |  |  |  |  |
| Deviance | 817,592 | 797,928 | 795,022 |
| LRT = | -  | 19.66, df = 2, p <0.001 | 2.906, df = 4, p = 0.57 |
| (-2LL Mn-1) - (-2LL Mn) |

*Note.* UGM = Unconditional Growth Model, SE = standard error, CI = Confidence Interval (95%), LRT= Likelihood Ratio Test (χ2)

Table 14: Multilevel Growth Model of Child Socio-Emotional Problems

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Model 1:** | **Model 2:** | **Model 3:** | **Model 4:** |
| **UGM** | **TIME x SEX child** | **TIME x AGE CAT** | **TIME x AGE CAT + TIME² x AGE CAT** |
|   | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* | *Estimate* | *CI* | *p* |
| *(SE)* | *(SE)* | *(SE)* | *(SE)* |
| *Initial Status* |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | –0.27 (0.18) | –0.62; 0.08 | 0.14 | –0.20 (0.21) | –0.62; 0.23 | 0.369 | –0.48 (0.20) | –0.88; –0.08 | **0.023** | –0.61 (0.021) | –1.01 ; –0.20 | **0.003** |
| Gender Child | - | –0.24 (0.39) | –1.01; 0.52 | 0.533 | - | - |  |  |
| Child Age at Adoption | - | - | 0.68 (0.34) | 0.01; 1.35 | *0.053* | 0.89 (0.40) | 0.21; 1.58 | **0.011** |
| Gender Child X Age Adoption | - | - | - | - |
| *Rate of Change* |  |  |  |  |  |  |  |  |  |  |  |  |
| Time  | 0.017 (0.051) | -0.08; 0.12 | 0.736 | 0.04 (0.06) | –0.08; 0.16 | 0.484 | –0.01 (0.06) | –0.12; 0.11 | 0.931 | –0.22 (0.11) | –0.43; –0.01 | **0.036** |
| Time X Gender Child  | - | –0.09 (0.31) | –0.30; 0.13 | 0.447 | - | - |  |  |
| Time X Age Adoption | - | - | 0.07 (0.10) | –0.13 ; 0.27 | 0.489 | 0.44 (0.19) | 0.07; 0.81 | **0.02** |
| Time X Gender Child X Age Adoption | - | - | - | - |
| Time²  | - | - | - | –0.05 (0.02) | –0.09; –0.01 | **0.014** |
| Time² x Age Adoption | - | - | - | 0.09 (0.04) | 0.01;0.16 | **0.022** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Variance Components* |  |  |  |  |  |  |  |  |  |  |  |  |
| Level 1- Within Parent  | 0.36 | 0.36 | 0.36 | 0.36 |
| Level 2 - Within couple  | 0.09 | 0.09 | 0.09 | 0.09 |
| Level 3 - Between couple (initial status)  | 1.31 | 1.3 | 1.2 | 1.15 |
| Level 3 - Between couples (rate of change) | 0.1 | 0.1 | 0.1 | 0.09 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Deviance | 1,009.53 | 1,008.96 | 1,002 | 994.9 |
| LRT | - | 0.60, df = 2, p = 0.74 | 7.42, df = 2, p=0.02 | 7.22, df = 2, p= 0.03 |
| -2(LL Mn-1) - (LL Mn) |

*Note.* UGM = Unconditional Growth Model, SE = standard error, CI = Confidence Interval (95%), LRT= Likelihood Ratio Test (χ2)

Table 15: Multilevel Mediation Model examining the mediating role of Parenting Stress in the relation between Paternal PRF to Child Socio-emotional Problems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   | **PM** |   | **CM** |   | **IC** |
|  |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |
| Total effect (c ) |  | **0.26 (0.12)** | **2.24** | **0.025** | **0.03, 0.49** |  | *-0.17 (0.09)* | *-1.9* | *0.056* | *-0.35,0.00* |  | 0.09 (0.10) | 0.91 | 0.363 | -0.10, 0.28 |
| Direct effect (c') |  | 0.07 (0.12) | 0.57 | 0.57 | -0.17, 0.30 |  | -0.07 (0.09) | -0.82 | 0.411 | -0.24, 0.10 |  | 0.03 (0.09) | 0.27 | 0.784 | -0.15, 0.20 |
| PS-Incompetence  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a1 |  | 0.17 (0.06) | 2.94 | 0.003 | 0.06, 0.28 |  | -0.11 (0.04) | -2.48 | 0.013 | -0.20, -0.02 |  | 0.06 (0.05) | 1.32 | 0.187 | -0.03, 0.16 |
| b1 |  | 0.64 (0.18) | 3.48 | 0.001 | 0.28, 1.00 |  | 0.64 (0.18) | 3.48 | 0.001 | 0.28, 1.00 |  | 0.65 (0.18) | 3.5 | <0.001 | 0.28, 1.00 |
| a1\*b1 |  | **0.11 (0.05)** | **2.24** | **0.025** | **0.01, 0.21** |  | **-0.07 (0.04)** | **-2.018** | **0.044** | **-0.14, 0.00** |  | 0.04 (0.03) | 1.24 | 0.216 | -0.02, 0.11 |
| PS-Role Restriction |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a2 |  | 0.31 (0.08) | 3.72 | <0.001 | 0.15, 0.48 |  | -0.16 (0.07) | -2.48 | 0.013 | -0.29, -0.03 |  | 0.17 (0.07) | 2.47 | 0.014 | 0.04, 0.31 |
| b2 |  | 0.13 (0.13) | 1.01 | 0.31 | -0.12, 0.37 |  | 0.14 (0.12) | 1.1 | 0.275 | -0.11, 0.38 |  | 0.13 (0.13) | 1.04 | 0.298 | -0.12, 0.38 |
| a2\*b2 |  | 0.04 (0.04) | 0.97 | 0.33 | -0.04, 0.12 |  | -0.02 (0.02) | -1.0 | 0.317 | -0.07, 0.02 |  | 0.02 (0.02) | 0.96 | 0.336 | -0.02, 0.11 |
| PS-Martial Relationship |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a3 |  | 0.31 (0.08) | 5.21 | <0.001 | 0.25, 0.56 |  | -0.21 (0.06) | -3.33 | 0.001 | -0.33, -0.09 |  | 0.06 (0.07) | 0.8 | 0.424 | -0.08, 0.19 |
| b3 |  | 0.16 (0.12) | 1.27 | 0.21 | -0.08, 0.39 |  | 0.16 (0.12) | 1.37 | 0.17 | 0.07, 0.39 |  | 0.18 (0.12) | 1.55 | 0.122 | -0.05, 0.41 |
| a3\*b3 |  | 0.06 (0.05) | 1.23 | 0.219 | -0.04, 0.16 |  | -0.03 (0.03) | '-1.27 | 0.204 | -0.09, 0.02 |  | 0.01 (0.01) | 0.71 | 0.477 | -0.02, 0.04 |
| PS-Social Isolation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a4 |  | 0.12 (0.07) | 1.7 | 0.091 | -0.02, 0.25 |  | -0.15 (0.05) | -2.85 | 0.004 | -0.25, -0.05 |  | 0.07 (0.06) | 1.16 | 0.247 | -0.05, 0.18 |
| b4 |  | -0.15 (0.16) | -0.98 | 0.329 | -0.46, 0.16 |  | -0.18 (0.16) | -1.13 | 0.257 | -0.485, 0.129 |  | -0.17 (0.16) | -1.06 | 0.289 | -0.47, 0.14 |
| a4\*b4 |   | -0.02 (0.02) | -0.85 | 0.397 | -0.06, 0.02 |   | 0.03 (0.03) | 1.05 | 0.292 | -0.02, 0.08 |   | -0.01 (0.01) | -0.78 | 0.436 | -0.04, 0.02 |

*Note*. PRFQ-PM: Parental Reflective Functioning Questionnaire, subscale Prementalizing Modes, PRFQ-CM: subscale Certainty about mental states child, PRFQ-IC, subscale Interest and Curiosity regarding mental states child, PSI: Parenting Stress Index, SE= Standard error.

Table 16: Multilevel Mediation Model examining the mediating role of Parenting Stress in the relation between Maternal PRF to Child Socio-emotional Problems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   | **X= PM** |   | **X= CM** |   | **X= IC** |
|  |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |
| Total effect (c ) |  | **1.03 (0.13)** | **8.02** | **<0.001** | **0.78, 1.28** |  | -0.06 (0.09) | -0.74 | 0.462 | -0.23, 0.11 |  | 0.06 (0.12) | 0.49 | 0.626 | -0.18, 0.30 |
| Direct effect (c') |  | **0.66 (0.14)** | **4.74** | **<0.001** | **0.39, 0.94** |  | 0.05 (0.08) | 0.66 | 0.508 | -0.11, 0.21 |  | **0.26 (0.11)** | **2.29** | **0.022** | **0.04, 0.48** |
| PSI-Incompetence  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a1 |  | 0.55 (0.09) | 6.54 | <0.001 | 0.39, 0.72 |  | -0.13 (0.06) | -2.27 | 0.023 | -0.24, -0.02 |  | -0.23 (0.08) | -2.94 | 0.003 | -0.39, -0.08 |
| b1 |  | 0.31 (0.15) | 2.13 | 0.033 | 0.025, 0.60 |  | 0.49 (0.15) | 3.22 | 0.001 | 0.19, 0.79 |  | 0.53 (0.15) | 3.55 | <0.001 | 0.24, 0.83 |
| a1\*b1 |  | **0.17 (0.09)** | **2.02** | **0.043** | **0.01, 0.34** |  | *-0.06 (0.03)* | *-1.85* | *0.064* | *-0.13, 0.00* |  | **-0.12 (0.06)** | **-2.26** | **0.024** | **-0.23, -0.02** |
| PSI-Role Restriction |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a2 |  | 0.59 (0.12) | 5.04 | <0.001 | 0.36, 0.81 |  | -0.16 (0.07) | -2.15 | 0.032 | -0.31, -0.01 |  | -0.17 (0.11) | -1.58 | 0.115 | -0.37, 0.04 |
| b2 |  | 0.08 (0.11) | 0.7 | 0.482 | -0.14, 0.30 |  | 0.11 (0.12) | 0.93 | 0.355 | -0.12, 0.34 |  | 0.10 (0.12) | 0.81 | 0.416 | -0.13, 0.32 |
| a2\*b2 |  | 0.05 (0.07) | 0.7 | 0.487 | -0.08, 0.17 |  | -0.02 (0.02) | -0.85 | 0.396 | -0.06, 0.02 |  | -0.02 (0.02) | -0.72 | 0.47 | -0.06, 0.03 |
| PSI-Martial Relationship |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a3 |  | 0.59 (0.12) | 5.21 | <0.001 | 0.37, 0.81 |  | -0.07 (0.07) | -0.90 | 0.366 | -0.21, 0.08 |  | -0.14 (0.10) | -1.40 | 0.162 | -0.35, 0.06 |
| b3 |  | 0.16 (0.10) | 1.53 | 0.125 | -0.04, 0.36 |  | 0.21 (0.11) | 1.89 | 0.059 | -0.01, 0.42 |  | 0.20 (0.11) | 1.87 | 0.062 | -0.01, 0.41 |
| a3\*b3 |  | 0.09 (0.06) | 1.47 | 0.141 | -0.03, 0.22 |  | -0.01 (0.02) | -0.81 | 0.416 | -0.05, 0.02 |  | -0.03 (0.03) | -1.14 | 0.254 | -0.08, 0.02 |
| PSI-Social Isolation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a4 |  | 0.40 (0.09) | 4.34 | <0.001 | 0.22, 0.58 |  | -0.13 (0.06) | -2.26 | 0.024 | -0.24, -0.02 |  | -0.16 (0.08) | -1.95 | 0.052 | -0.32, 0.00 |
| b4 |  | 0.14 (0.13) | 1.07 | 0.287 | -0.12, 0.40 |  | 0.18 (0.14) | 1.29 | 0.198 | -0.10, 0.46 |  | 0.20 (0.14) | 1.41 | 0.159 | -0.08, 0.47 |
| a4\*b4 |   | 0.06 (0.05) | 1.03 | 0.301 | -0.05, 0.16 |   | -0.02 (0.02) | -1.12 | 0.265 | -0.23, 0.11 |   | 0.06 (0.12) | 0.49 | 0.626 | -0.18, 0.30 |

*Note*. PRFQ-PM: Parental Reflective Functioning Questionnaire, subscale Prementalizing Modes, PRFQ-CM: subscale Certainty about mental states child, PRFQ-IC, subscale Interest and Curiosity regarding mental states child, PSI: Parenting Stress Index, SE= Standard error.

Table 17: Multilevel Mediation Model examining the mediating role of Parenting Stress in the relation between Child Socio-emotional Problems and Paternal PRF

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   | **Y = PM** |   | **Y = CM** |   | **Y = IC** |
|  |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |
| Total effect (c ) |  | **0.11(0.05)** | **2.16** | **0.031** | **0.01,0.21** |  | **-0.13 (0.07)** | **-1.97** | **0.049** | **-0.26, 0.00** |  | 0.06 (0.06) | 1 | 0.316 | -0.06, 0.19 |
| Direct effect (c') |  | 0.03(0.05) | 0.53 | 0.597 | -0.07,0.13 |  | -0.06 (0.07) | -0.91 | 0.36 | -0.20, 0.07 |  | 0.03 (0.07) | 0.49 | 0.628 | -0.10, 0.16 |
| PSI-Incompetence  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a1 |  | 0.17(0.04) | 4.74 | <0.001 | 0.10,0.25 |  | 0.17 (0.04) | 4.74 | <0.001 | 0.10, 0.25 |  | 0.17 (0.04) | 4.74 | <0.001 | 0.10, 0.25 |
| b1 |  | 0.09(0.12) | 0.75 | 0.451 | -0.15,0.33 |  | -0.06 (0.17) | -0.34 | 0.732 | -0.40, 0.28 |  | 0.00 (0.16) | -0.01 | 0.989 | -0.32, 0.32 |
| a1\*b1 |  | 0.02(0.02) | 0.74 | 0.457 | -0.03,0.06 |  | -0.01 (0.03) | -0.34 | 0.73 | -0.07, 0.05 |  | 0.00 (0.03) | -0.01 | 0.99 | -0.06, 0.06 |
| PSI-Role Restriction |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a2 |  | 0.18(0.06) | 3.18 | 0.001 | 0.07,0.29 |  | 0.18 (0.06) | 3.19 | 0.001 | 0.07, 0.29 |  | 0.18 (0.06) | 3.19 | 0.001 | 0.07, 0.29 |
| b2 |  | 0.17(0.08) | 2.11 | 0.035 | 0.01,0.33 |  | -0.05 (0.11) | -0.42 | 0.676 | -0.26, 0.17 |  | 0.21 (0.11) | 1.98 | 0.048 | 0.00, 0.42 |
| a2\*b2 |  | *0.03(0.02)* | *1.76* | *0.08* | *0.00,0.06* |  | -0.01 (0.02) | -0.42 | 0.678 | -0.05, 0.03 |  | *0.04 (0.02)* | *1.68* | *0.093* | *-0.01, 0.08* |
| PSI-Marital Relationship |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a3 |  | 0.16(0.06) | 3.00 | 0.003 | 0.06,0.27 |  | 0.16 (0.05) | 3.02 | 0.003 | 0.06, 0.27 |  | 0.16 (0.05) | 3.02 | 0.003 | 0.06, 0.27 |
| b3 |  | 0.32(0.08) | 4.2 | <0.001 | 0.17,0.47 |  | -0.22 (0.11) | -2.05 | 0.04 | -0.42, '-0.01 |  | -0.03 (0.10) | -0.27 | 0.79 | -0.22, 0.17 |
| a3\*b3 |  | **0.05(0.02)** | **2.44** | **0.015** | **0.01,0.09** |  | *-0.04 (0.02)* | *-1.70* | *0.09* | *-0.08, 0.01* |  | 0.00 (0.02) | -0.27 | 0.791 | -0.04, 0.03 |
| PSI-Social Isolation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a4 |  | 0.09(0.05) | 2.01 | 0.044 | 0.00,0.18 |  | 0.09 (0.05) | 2.01 | 0.045 | 0.00, 0.18 |  | 0.09 (0.05) | 2.01 | 0.045 | 0.00, 0.18 |
| b4 |  | -0.15(0.10) | -1.46 | 0.15 | -0.35,0.05 |  | -0.15 (0.14) | -1.04 | 0.296 | -0.43, 0.13 |  | -0.02 (0.13) | -0.13 | 0.897 | -0.28, 0.25 |
| a4\*b4 |   | -0.01(0.01) | -1.18 | 0.24 | -0.04,0.01 |   | -0.01 (0.02) | -0.93 | 0.355 | -0.04, 0.02 |   | 0.00 (0.01) | -0.13 | 0.9 | -0.03, 0.02 |

*Notes*. PRFQ-PM: Parental Reflective Functioning Questionnaire, subscale Prementalizing Modes, PRFQ-CM: subscale Certainty about mental states child, PRFQ-IC, subscale Interest and Curiosity regarding mental states child, PSI: Parenting Stress Index, SE= Standard error.

Table 18: Multilevel Mediation Model examining the mediating role of Parenting Stress in the relation between Child Socio-emotional Problems and Maternal PRF

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   | **Y = PRFQ-PM** |   | **Y = PRFQ-CM** |   | **Y = PRFQ-IC** |
|  |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |  | *B (SE)*  | *Z-value* | *p-value*  | *95% CI* |
| Total effect (c ) |  | **0.25 (0.03)** | **7.82** | **<0.001** | **0.19, 0.32** |  | -0.04(0.06) | -0.60 | 0.548 | -0.16,0.09 |  | 0.02 (0.05) | 0.48 | 0.629 | -0.07,0.11 |
| Direct effect (c') |  | **0.17 (0.04)** | **4.71** | **<0.001** | **0.10, 0.25** |  | 0.05 (0.07) | 0.73 | 0.464 | -0.09, 0.19 |  | **0.11 (0.05)** | **2.18** | **0.029** | **0.01,0.21** |
| PSI-Incompetence  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a1 |  | 0.29 (0.04) | 7.00 | <0.001 | 0.21, 0.37 |  | 0.29 (0.04) | 7.00 | <0.001 | 0.21, 0.37 |  | 0.29 (0.04) | 7.05 | <0.001 | 0.21, 0.37 |
| b1 |  | 0.17 (0.07) | 2.23 | 0.03 | 0.02, 0.31 |  | -0.23 (0.15) | -1.59 | 0.113 | -0.52, 0.05 |  | -0.28 (0.10) | -2.72 | 0.006 | -0.47, -0.08 |
| a1\*b1 |  | **0.05 (0.02)** | **2.12** | **0.034** | **0.00, 0.09** |  | -0.07 (0.04) | -1.55 | 0.122 | -0.15, 0.02 |  | **-0.08 (0.03)** | **-2.54** | **0.011** | **-0.14, -0.02** |
| PSI-Role Restriction |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a2 |  | 0.32 (0.06) | 5.72 | <0.001 | 0.21, 0.44 |  | 0.32 (0.06) | 5.72 | <0.001 | 0.21, 0.44 |  | 0.32 (0.06) | 5.72 | <0.001 | 0.21, 0.44 |
| b2 |  | 0.03 (0.06) | 0.46 | 0.65 | -0.09, 0.14 |  | -0.06(0.11) | -0.53 | 0.599 | -0.28, 0.16 |  | 0.04 (0.08) | 0.47 | 0.639 | -0.12, 0.19 |
| a2\*b2 |  | 0.01 (0.02) | 0.46 | 0.649 | -0.03, 0.05 |  | -0.02(0.04) | -0.52 | 0.600 | -0.09, 0.05 |  | 0.01 (0.03) | 0.47 | 0.640 | -0.04, 0.06 |
| PSI-Martial Relationship |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a3 |  | 0.33 (0.06) | 5.93 | <0.001 | 0.22, 0.44 |  | 0.33 (0.06) | 5.95 | <0.001 | 0.22, 0.44 |  | 0.33 (0.06) | 5.95 | <0.001 | 0.22, 0.44 |
| b3 |  | 0.05 (0.05) | 1.01 | 0.32 | -0.05, 0.16 |  | 0.10(0.10) | 0.98 | 0.327 | -0.10, 0.30 |  | 0.01 (0.07) | 0.16 | 0.873 | -0.13, 0.15 |
| a3\*b3 |  | 0.02 (0.02) | 0.99 | 0.322 | -0.02, 0.04 |  | 0.03(0.03) | 0.97 | 0.333 | -0.03,0.10 |  | 0.00 (0.02) | 0.16 | 0.873 | -0.04, 0.05 |
| PSI-Social Isolation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a4 |  | 0.23 (0.05) | 5.14 | <0.001 | 0.14, 0.32 |  | 0.23 (0.05) | 5.14 | <0.001 | 0.14, 0.32 |  | 0.23 (0.05) | 5.15 | <0.001 | 0.14, 0.32 |
| b4 |  | 0.03 (0.07) | 0.40 | 0.69 | -0.11, 0.16 |  | -0.16(0.13) | -1.24 | 0.214 | -0.42, 0.09 |  | -0.10 (0.09) | -1.11 | 0.269 | -0.28, 0.08 |
| a4\*b4 |   | 0.01 (0.02) | 0.40 | 0.687 | -0.02, 0.04 |   | -0.04(0.03) | -1.21 | 0.227 | -0.10, 0.02 |   | -0.02 (0.05) | 0.48 | 0.629 | -0.07, 0.11 |

*Notes*. PRFQ-PM: Parental Reflective Functioning Questionnaire, subscale Prementalizing Modes, PRFQ-CM: subscale Certainty about mental states child, PRFQ-IC, subscale Interest and Curiosity regarding mental states child, PSI: Parenting Stress Index, SE= Standard Error.