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# A matter of perspective? Differences between adolescent-parent and parent-teacher pairs in responses to the Strengths and Difficulties Questionnaire using a Scottish national cohort study

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# Appendix

Table 1
*CFA fit for SDQ 5-factor structure*

| Reporter | Age | CFI | RMSEA | SRMR | N |
|---|---|---|---|---|---|
| Adolescent | 14 | 0.861 | 0.049 | 0.056 | 2300 |
| Parent | 14 | 0.870 | 0.048 | 0.047 | 1936 |
| Teacher | 10 | 0.862 | 0.050 | 0.060 | 1242 |
| Parent | 10 | 0.847 | 0.048 | 0.049 | 1597 |

Table 2
*Univariate CFA for for SDQ components*

| Component | CFI | RMSEA | SRMR | N |
|---|---|---|---|---|
| **Parent reports, age 14** | | | | |
| Hyperactivity | 0.810 | 0.214 | 0.076 | 2306 |
| Conduct | 0.849 | 0.086 | 0.049 | 2328 |
| Emotion | 0.964 | 0.078 | 0.031 | 2312 |
| Peer | 0.974 | 0.047 | 0.026 | 2107 |
| Pro-social | 0.983 | 0.039 | 0.021 | 2254 |
| **Adolescent self-reports, age 14** | | | | |
| Hyperactivity | 0.884 | 0.150 | 0.065 | 2302 |
| Conduct | 0.987 | 0.026 | 0.017 | 2301 |
| Emotion | 0.983 | 0.059 | 0.024 | 2301 |
| Peer | 0.956 | 0.053 | 0.028 | 2302 |
| Pro-social | 0.998 | 0.012 | 0.011 | 2302 |
| **Parent reports, age 10** | | | | |
| Hyperactivity | 0.817 | 0.212 | 0.067 | 1767 |
| Conduct | 0.848 | 0.078 | 0.054 | 1795 |
| Emotion | 0.952 | 0.073 | 0.035 | 1784 |
| Peer | 0.946 | 0.061 | 0.035 | 1673 |
| Pro-social | 0.979 | 0.036 | 0.021 | 1800 |
| **Teacher reports, age 10** | | | | |
| Hyperactivity | 0.785 | 0.246 | 0.081 | 1755 |
| Conduct | 0.981 | 0.028 | 0.025 | 1653 |
| Emotion | 0.987 | 0.040 | 0.023 | 1585 |
| Peer | 0.950 | 0.056 | 0.034 | 1592 |
| Pro-social | 0.957 | 0.078 | 0.036 | 1580 |

Table 3
*Metric Invariance fit for parent-adolescent pairs*

| Constraints | CFI | Δ CFI | RMSEA | Δ RMSEA | SRMR | Δ SRMR | N |
|---|---|---|---|---|---|---|---|
| **Pro-social scale** | | | | | | | |
| Configural | 0.982 | – | 0.026 | – | 0.022 | – | 2154 |
| Metric | 0.975 | -0.008 | 0.029 | 0.003 | 0.029 | 0.007 | 2159 |
| Scalar | 0.855 | -0.012 | 0.066 | 0.037 | 0.053 | 0.025 | 2159 |
| Partial scalar | 0.964 | 0.010 | 0.033 | 0.004 | 0.033 | 0.004 | 2159 |
| **Peer problems** | | | | | | | |
| Configural | 0.965 | – | 0.036 | – | 0.025 | – | 2018 |
| Metric | 0.948 | -0.017 | 0.041 | 0.005 | 0.038 | 0.013 | 2018 |
| Scalar | 0.750 | -0.199 | 0.085 | 0.044 | 0.070 | 0.031 | 2018 |
| Partial scalar | 0.947 | 0.001 | 0.040 | 0.001 | 0.039 | 0.000 | 2018 |
| **Emotional symptoms** | | | | | | | |
| Configural | 0.974 | – | 0.046 | – | 0.026 | – | 2211 |
| Metric | 0.972 | -0.002 | 0.045 | 0.002 | 0.030 | 0.004 | 2211 |
| Scalar | 0.909 | -0.063 | 0.076 | 0.031 | 0.059 | 0.029 | 2211 |
| Partial scalar | 0.967 | -0.005 | 0.046 | 0.002 | 0.034 | 0.004 | 2211 |

*Note:*
Parental reports are set as the base reporter group
Age 14 reports

Table 4
*Metric Invariance fit for parent-teacher pairs*

| Constraints | CFI | ΔCFI | RMSEA | ΔRMSEA | SRMR | ΔSRMR | N |
|---|---|---|---|---|---|---|---|
| **Pro-social scale** | | | | | | | |
| Configural | 0.951 | – | 0.046 | – | 0.031 | – | 1554 |
| Metric | 0.947 | -0.005 | 0.045 | 0.001 | 0.037 | 0.006 | 1554 |
| Scalar | 0.920 | -0.027 | 0.052 | 0.007 | 0.042 | 0.006 | 1554 |
| Partial scalar | 0.936 | -0.010 | 0.047 | 0.002 | 0.039 | 0.002 | 1554 |
| **Peer problems** | | | | | | | |
| Configural | 0.932 | – | 0.044 | – | 0.034 | – | 1442 |
| Metric | 0.885 | -0.047 | 0.056 | 0.012 | 0.065 | 0.030 | 1452 |
| **Emotional symptoms** | | | | | | | |
| Configural | 0.972 | – | 0.038 | – | 0.026 | – | 1545 |
| Metric | 0.971 | -0.001 | 0.037 | 0.001 | 0.032 | 0.006 | 1545 |
| Scalar | 0.952 | -0.019 | 0.045 | 0.008 | 0.038 | 0.006 | 1545 |
| Partial scalar | 0.963 | 0.008 | 0.040 | 0.003 | 0.035 | 0.003 | 1545 |

*Note:*
Peer problems analysis halted due to insufficient model fit
Parent are set as the base reporter group
Age 10 reports

Table 5
*Parent-adolescent LDS estimates, conditional on adolescent gender*

| | Main effects | | Boys | | | Girls | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | 0.250* | -0.161* | -0.152* | 0.140* | 0.292* | 0.097* | 0.228* | 0.130* | 2145 |
| Peer | 0.007 | -0.095* | -0.003 | 0.108* | 0.111* | 0.004 | 0.021 | 0.017 | 2004 |
| Emotion | 0.314* | -0.237* | -0.022 | -0.108* | -0.086* | 0.295* | -0.028* | -0.324* | 2195 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 6
*Parent-adolescent LDS estimates, conditional on parental experiences of depression*

| | Main effects | | Yes | | | No | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | 0.061* | -0.007 | -0.091* | 0.122* | 0.212* | -0.030* | 0.176* | 0.206* | 2159 |
| Peer | -0.159* | -0.113* | 0.063* | 0.185* | 0.122* | -0.096* | -0.088* | 0.009 | 2018 |
| Emotion | -0.107* | -0.066* | 0.159* | -0.008 | -0.168* | 0.052* | -0.181* | -0.233* | 2211 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 7
*Parent-adolescent LDS estimates, conditional on housing tenure*

| | Main effects | | Rent home | | | Own home | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | 0.049 | 0.012 | -0.087* | 0.118* | 0.205* | -0.037* | 0.180* | 0.217* | 2142 |
| Peer | -0.128* | -0.105* | 0.068* | 0.201* | 0.133* | -0.060* | -0.032 | 0.028 | 2002 |
| Emotion | -0.131* | -0.013 | 0.183* | -0.010 | -0.193* | 0.052* | -0.154* | -0.206* | 2193 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 8
*Parent-adolescent LDS estimates, conditional on household language*

| | Main effects | | Other language | | | Only English | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | -0.017 | 0.100 | -0.052 | 0.063 | 0.115* | -0.070* | 0.145* | 0.215* | 2071 |
| Peer | 0.053 | -0.076 | -0.035 | 0.094 | 0.129 | 0.019 | 0.071* | 0.052* | 1938 |
| Emotion | 0.028 | -0.022 | 0.072 | -0.108* | -0.180* | 0.100* | -0.103* | -0.202* | 2121 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 9
*Parent-adolescent LDS estimates, conditional on household finances*

| | Main effects | | Other than managing well | | | Managing well | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | 0.064* | 0.000 | -0.092* | 0.116* | 0.209* | -0.029* | 0.180* | 0.209* | 2159 |
| Peer | -0.120* | -0.054 | 0.052* | 0.144* | 0.092* | -0.068* | -0.030 | 0.038 | 2018 |
| Emotion | -0.056* | -0.093* | 0.138* | -0.012 | -0.150* | 0.081* | -0.161* | -0.243* | 2211 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 10
*Parent-adolescent LDS estimates, conditional on family composition*

| | Main effects | | Single parent | | | Couple | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Adolescent score | Δ | Adolescent | Parent | Δ | Adolescent | Parent | Δ | N |
| Pro-social | 0.057* | -0.011 | -0.091* | 0.130* | 0.221* | -0.034* | 0.176* | 0.210* | 2159 |
| Peer | -0.143* | -0.058 | 0.080* | 0.184* | 0.104* | -0.063* | -0.017 | 0.046* | 2018 |
| Emotion | -0.105* | -0.031 | 0.181* | 0.000 | -0.181* | 0.075* | -0.136* | -0.211* | 2211 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 11
*Parent-teacher LDS estimates, conditional on gender*

| | Main effects | | Boys | | | Girls | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.175* | -0.064* | -0.072* | 0.029* | 0.102* | 0.103* | 0.140* | 0.038* | 1554 |
| Emotion | 0.004 | -0.025 | -0.020* | 0.065* | 0.085* | -0.016 | 0.044* | 0.060* | 1545 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 12
*Parent-teacher LDS estimates, conditional on parental mental health*

| | Main effects | | Below average | | | Average or above | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.078* | -0.023 | -0.059* | 0.026 | 0.085* | 0.019 | 0.081* | 0.062* | 1554, 1545 |
| Emotion | -0.092* | -0.064* | 0.048* | 0.175* | 0.127* | -0.044* | 0.019* | 0.063* | 1554, 1545 |

*Note:*
Unstandardised solution
Sampling weights applied.
Below average = >1 standard deviation below sample mean
* * p < 0.05

Table 13
*Parent-teacher LDS estimates, conditional on housing tenure*

| | Main effects | | Rent home | | | Own home | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.061* | 0.001 | -0.043* | 0.021 | 0.064* | 0.019 | 0.084* | 0.065* | 1507 |
| Emotion | 0.063* | -0.016 | 0.018 | 0.103* | 0.084* | -0.044* | 0.024* | 0.068* | 1501 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 14
*Parent-teacher LDS estimates, conditional on maternal education*

| | Main effects | | Below Scottish Highers level | | | At or above Highers | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.005 | 0.029 | -0.023 | 0.020 | 0.043 | -0.018 | 0.054* | 0.072* | 1543 |
| Emotion | -0.023 | -0.005 | -0.004 | 0.072* | 0.076* | -0.027* | 0.045* | 0.072* | 1535 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 15
*Parent-teacher LDS estimates, conditional on family composition*

| | Main effects | | Single parent | | | Couple family | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.060 | -0.033 | -0.047 | 0.046* | 0.092* | 0.013 | 0.073* | 0.059* | 1554 |
| Emotion | -0.035 | -0.076* | 0.004 | 0.138* | 0.134* | -0.031* | 0.027* | 0.058* | 1545 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05

Table 16
*Parent-teacher LDS estimates, conditional on household finances*

| | Main effects | | Other than managing well | | | Managing well | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Teacher score | Δ | Teacher | Parent | Δ | Teacher | Parent | Δ | N |
| Pro-social | 0.054* | -0.016 | -0.037* | 0.037* | 0.074* | 0.018 | 0.076* | 0.058* | 1554 |
| Emotion | -0.046* | -0.030 | 0.010 | 0.091* | 0.088* | -0.044* | 0.015 | 0.058* | 1544 |

*Note:*
Unstandardised solution
Sampling weights applied.
* * p < 0.05