$\label{lem:control} \textbf{Data supplement to: Cecil et al-Association between maladaptive parenting and child self-control over time: cross-lagged study using a monozygotic twin difference design$

British Journal of Psychiatry doi: 10.1192/bjp.bp.111.107581

Fig. DS1 Non-standardised coefficient estimates underlying the relationship between differential experience of harsh parenting and self-control differences from early to middle childhood (n=5184). Differences in ratings of self-control (SC), harsh parenting (Harsh), emotional difficulties (Emo. Diff.) and conduct problems (Cond. Prob.). Double arrowed lines indicate non-standardised correlation coefficients; single arrowed lines indicate non-standardised path coefficients; dotted arrowed lines indicate non-significant coefficients. Paths with two coefficients indicate presence of a significant gender difference (male/female coefficient). *P<0.05, **P<0.01, ***P<0.001.

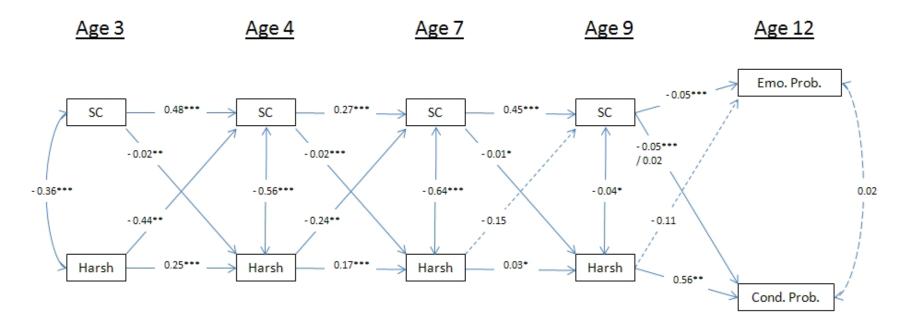
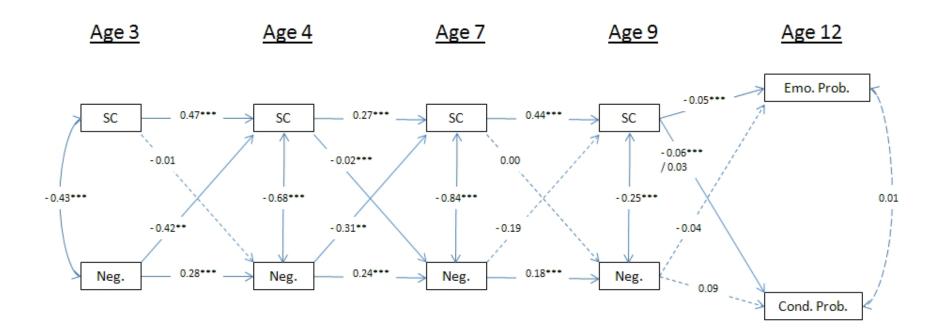


Fig. DS2 Non-standardised coefficient estimates underlying the relationship between differential experience of negative parental feelings and self-control differences from early to middle childhood (n=5180). Differences in ratings of self-control (SC), negative parental feelings (Neg.), emotional difficulties (Emo. Diff.) and conduct problems (Cond. Prob.). Double arrowed lines indicate non-standardised correlation coefficients; single arrowed lines indicate non-standardised path coefficients; dotted arrowed lines indicate non-significant coefficients. Paths with two coefficients indicate presence of a significant gender difference (male/female coefficient). *P<0.05, **P<0.01, ***P<0.001.



AGE 3 (nine items)

- o Restless*
- o Temper tantrums*
- o Squirmy*
- Has difficulty completing activities*
- Poor concentration*
- o Inattentive*
- Cannot wait for things*
- o Cries easily*
- o Gives up easily*

 $\alpha = .767$

AGE 4 (eleven items)

- o Restless*
- o Fidgets*
- Temper tantrums
- Has difficulty completing activities*
- o Easily distracted*
- o Inattentive*
- Cannot wait for things*
- o Cries easily*
- o Gives up easily*
- Thinks before acting
- Sees tasks through to the end

 $\alpha = .825$

AGE 7 (eight items)

- o Restless, overactive*
- o Temper tantrums*
- Constantly fidgeting/squirming*
- Has difficulty completing activities *
- Thinks things out before acting
- Easily distracted*
- o Sees tasks through to the end
- Difficulty waiting for things

 $\alpha = .804$

AGE 9 (nine items)

- o Restless*
- Fidgets or squirms*
- Temper tantrums*
- Easily distracted*
- o Fun is more important*
- o Thinks before acting
- Sees tasks through to end
- Makes the most of tedious tasks
- o Likes to use brain
- o Puts effort to improve

 $\alpha = .786$

Parent-rated scales used for the self-control composite measure:

The self-control scales were formed using items extracted from two standard instruments. Across the different time points, four items were derived from the Revised Rutter Parent Scale for Preschool Children (1), and eight items were derived from the Strengths and Difficulties Questionnaire (2). In addition, we incorporated supplementary individual items included in TEDS data collection that relate to cognitive effort (four items) and hyperactivity (two items).

^{*=} Reversed items; α = Cronbach's alpha

References:

- **1.** Hogg C, Rutter M, Richman N. Emotional and Behavioural Problems in Children. In *Child psychology portfolio* (ed I Sclare): 1-34. Windsor: nferNELSON, 1997.
- **2.** Goodman R. The Strengths and Difficulties Questionnaire: a research note. *J Child Psychol Psychiatry* 1997; **38:** 581–86.