

S1 Copy of the Peer Victimization Questionnaire

This is a short questionnaire about bullying at primary school. First, please answer the two questions in bold. If the answer to either is 'yes', answer the short questions which follow ticking the boxes which best describe how often each thing happened. If the answer to either of the main questions is 'no' leave the short questions blank. If there was more than one period of bullying, please answer for the first time, when you were youngest. Thank you

| | Never | Once | Occasionally /rarely | Weekly | Daily/ almost daily |
|--|-------|------|-------------------------|--------|------------------------|
| 1. At primary school, aged 5-11, I was bullied by other children/another child - (if yes carry on, if no, move to Q2) | | | | | |
| - I was hit, punched or kicked | | | | | |
| - I was scratched | | | | | |
| - I was threatened | | | | | |
| - I was sent nasty notes/texts/emails | | | | | |
| - I was ignored | | | | | |
| - People said very nasty things to me | | | | | |
| - I felt unable to defend myself | | | | | |
| - I was frightened | | | | | |
| How old were you the first time | | | | | |
| About how long did it last? (<i>please circle nearest</i>) it only happened once / it lasted: weeks / months / years | | | | | |

S2 Factor analysis for the Peer Victimization Questionnaire (PVQ)

Bullying victimization from peers can be divided into two components; direct physical (e.g. hitting, scratching), and more indirect relational bullying (e.g. ignoring, threatening, sending nasty texts)[17,27,63,64]. Therefore, we expected that the PVQ would give a two-factor structure (relational and physical bullying). For this reason, we examined the structure of the PVQ using a theory-driven Confirmatory Factor Analysis (CFA) in N=900 participants who had complete PVQ data. We hypothesized that the items “*I was hit, punched, kicked*”, and “*I was scratched*” would load onto a physical bullying latent variable, whereas the items “*I was sent nasty notes/text/emails*”, “*I was threatened*”, “*I was ignored*”, “*people said nasty things to me*”, “*I felt unable to defend myself*”, and “*I was frightened*” would load onto a relational bullying latent variable. The model fit showed good fit to the data when the item “*I was threatened*” was allowed to load on both factors [N=900, $\chi^2(18)=58.617, P=.000, CFI=.998, TLI=.996, RMSEA=.050$ (90% CI=0.036-0.065) see Table S1 for the specific factor loadings]. We implemented this two factor measurement model in our full SEM.

Table S1, Factor loadings for the Peer Victimization Questionnaire items.

| Latent variables: | Items: | CFA without cross loading | | | | CFA with cross loading | | | |
|----------------------------|-------------------------------------|---------------------------|--------|-------|---------|------------------------|--------|-------|---------|
| | | Est. | (SE) | Z | P(> z) | Est. | (SE) | Z | P(> z) |
| Relational bullying | | | | | | | | | |
| | I was frightened | 1.00 | | | | 1.00 | | | |
| | I felt unable to defend myself | 1.01 | (0.01) | 79.99 | <.001 | 1.00 | (0.01) | 79.98 | <.001 |
| | I was ignored | 0.94 | (0.02) | 64.61 | <.001 | 0.94 | (0.02) | 64.77 | <.001 |
| | I was sent nasty notes/texts/emails | 1.01 | (0.01) | 86.39 | <.001 | 1.01 | (0.01) | 85.25 | <.001 |
| | I was threatened | 0.80 | (0.03) | 27.04 | <.001 | 0.48 | (0.05) | 9.83 | <.001 |
| | People said nasty things about me | 0.96 | (0.02) | 64.74 | <.001 | 0.80 | (0.03) | 27.16 | <.001 |
| Physical bullying | | | | | | | | | |
| | I was hit, punched or kicked | 1.00 | | | | 1.00 | | | |
| | I was scratched | 0.97 | (0.03) | 30.05 | <.001 | 0.98 | (0.03) | 31.23 | <.001 |
| | I was threatened | | | | | 0.58 | (0.06) | 10.12 | <.001 |

S3 Additional self-esteem analysis

We were interested in investigating whether the effects of friendship support and/or family support were explained by self-esteem at age 14 (measured with the Rosenberg self-esteem scale[68,69]), we added a path where friendships, family support, and physical bullying were related with self-esteem at age 14. We also added a path where self-esteem at age 14 was associated with depressive symptoms at age 17. This model has a good fit, $X^2(63)=190.18, p=.000, CFI=.992, TLI=.988, RMSEA=.052 (90\%CI=.043-.06)$, and all the existing paths in the model remained (including the associations between family support and depressive symptoms and friendship support and depressive symptoms, see below Fig S1 for details of the paths). In addition, friendship support and family support have a positive association with self-esteem at age 14, and self-esteem has a negative association with depressive symptoms at age 17.

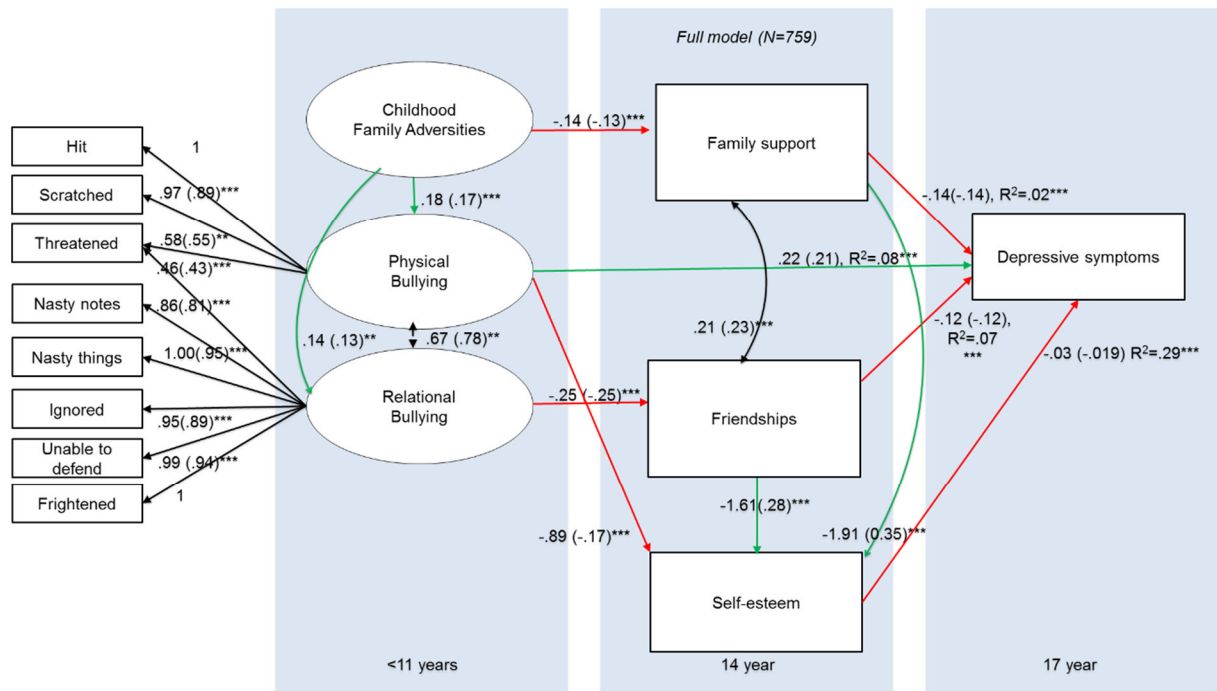


Figure S1. SEM with Self-esteem at age 14.

Note. ***= $P < .001$, **= $P < .01$, *= $P < .05$. Estimates are unstandardized (standardized) path coefficients. Red arrows depict negative relationships, green arrows show positive relationships. Black double headed arrows represent covariances that were specified between endogenous variables in the model. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths. Gender was specified as covariate for all endogenous variables in this model, but is not depicted for simplicity.