CLASSROOM SEPARATION OF TWINS DURING PRIMARY SCHOOL

M. van Leeuwen, S.M. van den Berg, C.E.M. van Beijsterveldt, D.I. Boomsma
Dept Biological Psychology, Vrije Universiteit van Amsterdam
email: M.van.Leeuwen@psy.vu.nl

Background
In the Netherlands parents and teachers of 4-year-old twins have to decide whether to put the children into the same classroom or not. This decision is not evidence-based.

Research questions
1. Are there pre-existing differences between separated and non-separated twins?
2. Are there any effects of separation on maternal and/or teacher ratings and/or academic performance?

A distinction was made between short-term effects measured at age 7 in twins separated at age 5 and long-term effects measured at age 12 in twins separated during the whole school period.

Measures
• Social economic status (SES) at age 3
• Maternal ratings of problem behaviour (CBCL) at age 3, 7, 12
• Teacher ratings of problem behaviour (TRF) at age 7, 12
• Test for academic performance (CITO) at age 12

Statistics
• To test for pre-existing differences: logistic regression analysis with SES and CBCL at age 3 as predictors.
• To test the effect of separation: (M)ANOVA with problem behaviour or academic performance as dependent variables. When appropriate a MANOVA for repeated measures was performed to correct for pre-existing problem behaviour at age 3. All dependent variables were corrected for SES

Subjects
Short-term effects on CBCL ratings were measured in 7597 twins (TRF 5686), long-term effect on CBCL ratings were measured in 2184 twins (TRF 284, CITO 843).

Results
Separation at age 5 predicted by externalizing and SES at age 3
Age 7: separated twins had more internalizing problems than separated twins, which could be attributed to the separation itself.
Age 12: no differences in problem behaviour; no differences in academic achievement.

Conclusion
The decision to separate twins when they enter primary school is partly based on existing problems and is associated with SES. In the short run, separation leads to more internalizing problems. In the long run, separation does not affect problem behaviour or academic achievement. The results were similar for MZ and DZ twins.