
**Abstract:**
Background: Adopted children have been said to be difficult children, scarred by their past experiences in maltreating families or neglecting orphanages, or by genetic or pre- and perinatal problems. Is (domestic or international) adoption an effective intervention in the developmental domains of physical growth, attachment security, cognitive development and school achievement, self-esteem, and behaviour problems? Method: Through a series of meta-analyses on more than 270 studies that include more than 230,000 adopted and non-adopted children and their parents an adoption catch-up model was tested.

Results: Although catch-up with current peers was incomplete in some developmental domains (in particular, physical growth and attachment), adopted children largely outperformed their peers left behind. Adoptions before 12 months of age were associated with more complete catch-up than later adoptions for height, attachment, and school achievement. International adoptions did not lead to lower rates of catch-up than domestic adoptions in most developmental domains. Conclusions: It is concluded that adoption is an effective intervention leading to massive catch-up. Domestic and international adoptions can be justified on ethical grounds if no other solutions are available. Humans are adapted to adopt, and adoption demonstrates the plasticity of child development.

Keywords: Adoption, meta-analysis, catch-up, developmental plasticity, ethics, growth, attachment, behaviour problems, brain damage, malnutrition, residential care, resilience, self-esteem.


**Abstract**
In the present longitudinal study, early adopted children (*N* = 160) were followed from infancy to adolescence to assess the influence of previous and concurrent factors on the children’s social development. This study allowed for more conclusive evidence of the influence of early and concurrent rearing experiences and temperament on adolescents’ social development, independent of shared genetic factors between children and parents. Results showed that social development and temperament were stable over time and that both previous and current parental sensitivity were important in predicting social development in adolescence. Quality of the early parent-child relationship was indirectly associated with social development in adolescence through the influence on social development in middle childhood. Maternal sensitivity in middle childhood and in adolescence partly buffered the negative effects of difficult temperament on social development in adolescence. Adaptation emerged as the product of both developmental history and current circumstances.

**Abstract**
Previous studies have related attachment disorganization in children to either dopamine D4 receptor polymorphisms or maternal unresolved loss or trauma and frightening or anomalous parenting. In this study it was examined whether the interaction between genetic (DRD4 7-repeat and -521 C/T) and environmental risk factors (maternal unresolved loss/trauma and maternal frightening behavior) was associated with infant disorganization. A moderating role of the DRD4 gene was found. Maternal unresolved loss or trauma was associated with infant disorganization, but only in the presence of the DRD4 7-repeat polymorphism. The increase in risk for disorganization in children with the 7-repeat allele exposed to maternal unresolved loss/trauma compared to children without these combined risks was 18.8 fold. Similar moderating effects were not found for maternal frightening behavior. Our findings indicate that children are differentially susceptible to unresolved loss or trauma dependent on the presence of the 7-repeat DRD4 allele.


**Abstract**
The current article presents results from a twin study of genetic and environmental components of maternal sensitivity and infant attachment and their association. The sample consisted of 136 twin pairs from 2 sites: Leiden, the Netherlands, and London, UK. Maternal sensitivity was assessed in the home at 9–10 months, and infant attachment security was observed in the laboratory at 12 months. The study yielded little evidence that genetic factors are involved in variations between twins in maternal sensitivity ratings but did find that shared variance in maternal sensitivity was able to account for some of the similarity between twins in attachment security. Weak nonshared associations between sensitivity and attachment appeared to suppress the magnitude of the correlation between attachment and sensitivity in twin children. The results could indicate that the attachment security of one twin may depend on the relationship the parent has with the other twin. The results are brought to bear on the validity of attachment theory as a theory of primarily shared environmental effects in children’s development and the continuing challenge posed to attachment theory by within-family differences in socioemotional processes.


**Abstract**
We reviewed nine studies in which children’s cortisol levels at center daycare were assessed. Our first hypothesis, concerning intraindividual differences in cortisol levels across home and daycare settings, was also tested in a meta-
analysis. Our main finding was that at daycare children display higher cortisol levels compared to the home setting. Diurnal patterns revealed significant increases from morning to afternoon, but at daycare only. The combined effect size for seven pertinent studies (n = 303) was r = .18 (CI .06–.29, p = .003). We examined all papers on possible associations between cortisol levels and quality of care, and the influences of age, gender, and children’s temperament. Age appeared to be the most significant moderator of this relation. It was shown that the effect of daycare attendance on cortisol excretion was especially notable in children younger than 36 months. We speculate that children in center daycare show elevated cortisol levels because of their stressful interactions in a group setting.


**Abstract:**
This study prospectively examined the effects of adolescent (N=81) and professional caregiver (N=33) attachment representations, measured using the Adult Attachment Interview, on therapeutic relationships in a youth treatment institution. After the first 3 months of the clients’ stay in the institution, no effects of adolescents’ or mentors’ (i.e., the professional caregiver assigned) security and type of attachment representations were found. In a subgroup of 28 clients staying for a longer period, more secure adolescents were perceived by their mentors as increasing their secure base use and decreasing avoidance of contact, whereas more secure mentors were increasingly perceived as available as a secure base. Moreover, specific combinations of attachment representations of mentor and adolescent had different effects on adolescent hostility.


**Abstract:**
The current meta-analysis examines the links between unresolved representations of attachment, anomalous parental behavior, and disorganized attachment relationships in 12 studies including 851 families. We found moderate effect sizes for the associations between unresolved states of mind and anomalous behavior (r=.26), unresolved states of mind and infant disorganized attachment relationships (r=.21), and anomalous behavior and disorganized attachment relationships (r=.34). Sample characteristics, observational context, and observational measure were not associated with differences in effect sizes. Only a small part of the association between unresolved states of mind and disorganized attachment relationships was explained by the mediation of anomalous parental behavior (.26* .34=.09). Other factors yet to be uncovered must mediate the influence of unresolved states of mind on infant disorganized attachment; thus, further exploration of infant, parental, ecological, and genetic factors are warranted.
Abstract:
This study examines the prevalence, stability, and development of physical aggression, as reported by mothers and fathers, in a sample of children initially recruited at 12, 24, and 36 months (N = 2,253) and in a subsample followed up 1 year later (n = 271) in a cross-sequential design. Physical aggression occurred in 12-month-olds, but significantly more often in 24- and 36- month-olds. The rates of physically aggressive behaviors increased in the 2nd year of life, and declined from the 3rd birthday onward. Stabilities were moderate for 12-month-olds and high for 24- and 36-month-olds. At the ages of 24 and 36 months, boys were more aggressive than girls. The results confirm and extend R.E. Tremblay's (2004) hypothesis about the early development of physical aggression.


Abstract:
Background: This study investigated the occurrence, cross-informant agreement, 1-year stability, and context characteristics of externalizing behaviors in 12-month-old children, as compared to 24- and 36- month-olds. Method: In a general population sample of 786 12-month-olds, 720 24- month-olds, and 744 36-month-olds, the CBCL/1-1/2-5 was obtained from mothers and fathers and again one year later for a subsample of 307 children. Mothers of 1,831 children also provided complete data on child, mother, and family characteristics. Results: Over three-fourths of the externalizing behaviors occurred in more than 10% of 12-month-olds, over one-third of the items in more than 25%. For almost all externalizing behaviors, the occurrence was significantly lower in 12-month-olds compared to 24- and 36-month-old children. Mother-father agreement and 1-year stability of externalizing behaviors in 12-month-old children were significant, but generally somewhat lower than in 24- and 36-month-olds. Context characteristics were related to externalizing behaviors in 12-month-olds as well as in older children. Some associations were less pronounced in 12-month-old children, but the overall pattern of correlates was similar across age groups. Conclusions: The results of this study show that externalizing behaviors in 12-monthold children merit further research and can be assessed with the CBCL in a valid way.


Abstract:
Previous studies have related aggression and other externalizing problems in children to either dopamine D4 receptor polymorphisms or harsh and insensitive
parenting. In this study it was determined whether the combination of the DRD4 7-repeat polymorphism and maternal insensitivity predicted significantly more externalizing behavior in preschoolers. The results pointed to a gene-environment interaction effect: maternal insensitivity was associated with externalizing (oppositional, aggressive) behaviors, but only in the presence of the DRD4 7-repeat polymorphism. The increase in externalizing behaviors in children with the 7-repeat allele exposed to insensitive care compared to children without these combined risks was sixfold. The data indicate that children are differentially susceptible to insensitive parenting dependent on the presence of the 7-repeat DRD4 allele.


**Abstract:**
The current intervention study aimed at breaking the potential intergenerational cycle of insecure attachment. The authors randomly assigned 81 first-time mothers to one of two intervention groups or a control group. The interventions involved four home visits when the infants were between 7 and 10 months old. The first intervention, VIPP, consisted of video-feedback and brochures to enhance sensitive parenting. The second intervention, VIPP-R, involved additional discussions of mothers' childhood attachment experiences in relation to their current caregiving. After the intervention, intervention mothers were more sensitive than control mothers. The interventions were most effective for highly reactive children and their mothers, providing experimental support for Belsky's (1997) hypothesis of highly reactive versus less reactive children's evolutionary based differential susceptibility to rearing influences.