# Tied to mommy\*s womb?: the effects of maternal prenatal emotional complaints and parent-child interactive behaviour on infants\*, toddlers\* and preschoolers\* self-regulation and socio-emotional adjustment; Part II

Published: 15-08-2006 Last updated: 20-05-2024

The relationships between emotional complaints of the mothers during pregnancy and the self regulation capacities, temperament, mental and motor development of the children are studied, taking into account the influence of the father, that could be...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Observational non invasive

# **Summary**

### ID

NL-OMON29888

**Source** ToetsingOnline

Brief title The Kempen study II

### Condition

- Other condition
- Pregnancy, labour, delivery and postpartum conditions
- Mood disorders and disturbances NEC

#### Synonym

Emotional complaints during pregnancy and child development

#### **Health condition**

Ontwikkelingsproblemen van kinderen

**Research involving** Human

### **Sponsors and support**

Primary sponsor: Universiteit van Tilburg Source(s) of monetary or material Support: Ministerie van OC&W

### Intervention

**Keyword:** early child development, Emotional complaints during pregnancy, parent-child interaction

### **Outcome measures**

#### **Primary outcome**

The development of the children and their self-regulation capacities in

relation to the quality of the interaction with the parents and the emotional

complaints of the mothers during pregnancy form the primary outcome.

#### Secondary outcome

The amount of current emotional complaints of both parents, their personality

characteristics and their coping style form the secundary outcome.

# **Study description**

#### **Background summary**

Children with a depressed mother are at significantly greater risk for multiple behavioural and emotional problems (Beardslee, Versage & Gladstone, 1998). Recently, even anxious and depressive symptoms experienced by the mother during pregnancy are found significantly related to temperamental and behavioural disturbances in young and school-aged children (see e.g., Van den Berg & Marcoen, 2004). The difficulties in early childhood particularly include attentional, emotional and behavioural problems, which may point to quite

widespread influences on the developing brain (Taylor & Rogers, 2005). However, maternal depressive symptoms during pregnancy explained only between 7 and 22% of the variance in the infants\* temperament and childhood behaviour problems. Moreover, it has also been noted that children with (prenatally) depressed mothers do not necessarily display behavioural and emotional dysfunctions and sometimes even show adaptive outcomes (for reviews see Beardslee et al., 1998; Cicchetti & Toth, 1998; Cummings & Davies, 1994). The present study focuses on two important factors that might contribute to the variation in socio-emotional adjustment of infants, toddlers and preschoolers of mothers with emotional complaints during pregnancy. First, the child\*s ability of self-regulation. Emotional and behavioural regulation represent an important child characteristic that could promote resiliency or exacerbate risk in the context of maternal depression in the prenatal period and in the first years of a child\*s life (Luoma et al, 2001; Silk et al., 2005). Despite numerous studies demonstrating a strong biological component to self-regulation capacities (Rothbart & Bates, 1998), evidence also suggests that development of self-regulation (e.g., successful coping with negative circumstances) is highly dependent on the caregivers\* daily interactive behaviour pattern. The second factor that is studied specifically is the presence c.q. interactive behaviour of a non-depressed father (Reck et al., 2004). Pelaez et al. (1994) found that children of depressed mothers seemed less depressed after contact with a familiar non-depressed nursery school teacher and Hossain et al. (1994) found that the negative behaviours that infants displayed in interaction with their depressed mothers were not associated to the non-depressed fathers. When the fathers interacted positively, the infants responded with positive behaviour and less depressive signs. It was concluded that non-depressed fathers may indeed buffer the effects of maternal depression on infant behaviour. However, studies examining the contribution of father\*s interactive behaviour to the self-regulation skills of children are scarce.

#### **Study objective**

The relationships between emotional complaints of the mothers during pregnancy and the self regulation capacities, temperament, mental and motor development of the children are studied, taking into account the influence of the father, that could be a protective or reinforcing factor. The study will provide insight in the extent that care should be given to pregnant women or young parents with emtional complaints to improve child development. Theoretically is important to study the extent that the 'fetal programming effect' is reinforced or weakened through the quality of the parent-child interaction. In addition the study may have practical value by showing which pattern of self regulation capacities of the children and which way of parent-child interaction is associated positively with the development of the children.

#### Study design

Twice a home visit is done, videotaping games with the children as well as mother and father-child interaction during two games. Several measurements are used.

### Children

\* Mental and motor development is assessed by the mothers with the Ages and Stages Questionnaire (ASQ; Bricker & Squires, 1996). In addition the Bayley Infant Scales of Development (BSID II; Van der Meulen et al., 2002) are used for children until 3\* years and the Snijders Oomen Niet-verbale intelligentie test (SON-R; Tellegen et al., 1998) is used for children until 5 years of age. \* Child Temperament is assessed by the parents with the (Early) Child Behavior Questionnaire ((E)CBQ; Rothbart, 2003).

\* Self-regulation is assessed with the 1) \*dysregulation\* dimenseion of the Infant Toddler Socio-Emotional Assessment (ITSEA; Carter & Briggs-Cowan,1999).
2) \*coping\* behaviour is observed during standardized games 3) Physiological regulation is assessed during the coping games by three cortisol measurements.
\* Parent-child interaction quality is assessed using the video-recording and the Emotional Availability Scales (EAS; Biringen, Robinson, & Emde, 1998) and Erickson Rating Scales (Erickson, Sroufe, & Egeland, 1985).

\* Quality of attachment is assessed after the home visit by the researcher (Waters & Dean, 1985)

### Parents

The Adult Temperament Questionnaire is answered by the parents (ATQ; Rothbart et al., 2000). The coping style of the parents is assessed using the Coping Inventory for Stressful Situations (CISS; De Ridder & Van Heck, 2004). The STAI (State-Trait Anxiety inventory, van der Ploeg et al., 1980) is used to assess anxiety is a personality characteristic.

### Teachers

The Teacher Report Form (TRF) is answered concerning day care or school behaviour. The Preschool Social Behavior Questionnaire (PSBQ; Tremblay et al., 1992) the Gedragsvragenlijst voor Peuters & Kleuters (GVPK; Goossens et al., 2000) provide information on social behaviour with peers.

### Study burden and risks

The nature and extent of the study is judged to be moderate, as the parents are asked to visit only once a health center for the developmental test of their child and are visited twice at home. In addition they are asked to answer questionnaires concerning themselves as well as their child and they are required to play games with their child that are recorded. The child is required to participate in several games known to be enjoyed by most of the children.

# Contacts

**Public** Universiteit van Tilburg

Postbus 90153 5000 LE Tilburg NL **Scientific** Universiteit van Tilburg

Postbus 90153 5000 LE Tilburg NL

# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Children (2-11 years) Elderly (65 years and older)

### **Inclusion criteria**

Participation with Kempen study I

### **Exclusion criteria**

Single parents

# Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Basic science

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-09-2006
Enrollment:	160
Туре:	Actual

# **Ethics review**

Approved WMO	
Date:	15-08-2006
Application type:	First submission
Review commission:	METC Brabant (Tilburg)

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

# In other registers

### Register

ССМО

ID NL12843.008.06