How early triadic family processes predict children's strengths and difficulties at age three

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Abstract

This study aimed to determine longitudinal associations of early triadic family processes and 3-year-old children's strengths and difficulties and to control those associations for family risk factors. In 80 families expecting their first child, we assessed parents' anticipations of future family relationships (Triadic Capacity) and parents' psychological distress, marital quality, and education level. When the children were 4 months of age, we observed triadic family interaction in a standardized laboratory play scenario. The children's strengths and difficulties at age three were assessed using multiple methods. As expected, parents' Triadic Capacity assessed before the child was born predicted triadic family interaction 4 months after birth. Early triadic family processes explained variance in children's emotional functioning at age three over and above the effects of family stress factors assessed before the child was born. However, early triadic family processes did not explain children's co-operative behaviour or children's symptoms at age three. Results also highlighted the roles of fathers' education level in children's externalizing behaviour, mothers' psychological distress at children's low co-operative behaviour, and low marital quality in children's internalizing behaviour.
How early triadic family processes predict children’s strengths and difficulties at age three

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This study aimed to determine longitudinal associations of early triadic family processes and 3-year-old children’s strengths and difficulties and to control those associations for family risk factors. In 80 families expecting their first child, we assessed parents’ anticipations of future family relationships (Triadic Capacity) and parents’ psychological distress, marital quality, and education level. When the children were 4 months of age, we observed triadic family interaction in a standardized laboratory play scenario. The children’s strengths and difficulties at age three were assessed using multiple methods. As expected, parents’ Triadic Capacity assessed before the child was born predicted triadic family interaction 4 months after birth. Early triadic family processes explained variance in children’s emotional functioning at age three over and above the effects of family stress factors assessed before the child was born. However, early triadic family processes did not explain children’s co-operative behaviour or children’s symptoms at age three. Results also highlighted the roles of fathers’ education level in children’s externalizing behaviour, mothers’ psychological distress at children’s low co-operative behaviour, and low marital quality in children’s internalizing behaviour.

Clinicians and developmental psychologists see the quality of the parent–child relationship and interaction as decisively important for the development of the child. Although considerable research has been devoted to the dyadic mother–child or father–child relationship, rather less attention has been paid to triadic family processes. The present study examines prospective relationships between triadic family processes and children’s

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functioning: Do parents’ representations (before having children) of future family relations predict observed triadic family interactions when infants are 4 months old? And do those two family processes affect the strengths and difficulties of 3-year-old children?

A number of longitudinal studies investigated the transition to parenthood and found predictors of later maladjustment in children. Prenatal parental depression (Heinecke, Diskin, Ramsey-Klee, & Oates, 1986), psychiatric illness (Weiner, 1982; Zahn-Waxler, Mayfield, Radke-Yarrow, & McKnew, 1988), and low marital satisfaction (Cowan & Cowan, 1992) were found to be risk factors for children’s adjustment. Correlations between family stress factors and children’s adjustment may be mediated by parent–child interaction (Cummings & Davies, 1994; Gonzales, Pitts, Hill, & Roosa, 2000). Psychiatric illness in parents leads to a reduction in the quality of parent–child interaction and, through this, impacts children’s psychological well-being (Cummings, 1994; Dodge, 1990).

Attachment research has examined in detail the influence of the mother–child relationship on child’s development (Grossmann et al., 2002; Sroufe, 2002; Steele, Steele, Croft, & Fonagy, 1999; Steele, Steele, & Johansson, 2002; Warren, Huston, Egeland, & Sroufe, 1997). Besides the mother–child dyad, some attachment studies have begun to examine father–child interaction and its influence on attachment development (such as Grossmann et al., 2002). However, these studies focus on dyadic relationships within the family and do not evaluate the influences of family processes on children’s development.

Some studies demonstrated a connection between marital conflict and dissatisfaction and psychopathological development in children (Cowan & Cowan, 1992; Cummings, 1994; Fincham, 1998). However, parents’ (or other adult persons’) warm and supportive relationships with the child can have a protective effect and lessen the effects of marital discord (Rutter, 1979). More recent studies provide a more differentiated picture, showing that it is mainly openly expressed hostility towards the child resulting from marital discord that makes children feel guilty. It is not the quality of the marital relationship per se that causes the child’s psychopathological development, but rather parental behaviours towards the child (such as hostility) that are shaped by marital conflict (Cummings, 1994; Katz & Gottman, 1997; Kelly, 2000; Kitzmann, 2000; Stocker, Richmond, Low, Alexander, & Elias, 2003).

Triadic family processes

All of the investigations mentioned above examined significant dyadic family relationships: mother–child, father–child, or parents–child. Of course, good dyadic relationships are of central importance in children’s
development. But behaviour at the level of the family group is a more varied and complex emotional environment than several separate dyadic relationships. Dyads and triads present very different experiences to the children living within them (McHale, Kuersten-Hogan, Lauretti, & Rasmussen, 2000). For example, triadic relationship experiences give children repeated experiences and learning of patterns of adult turn-taking, co-operation, and hostility—competitiveness between adults (McHale & Rasmussen, 1998). These experiences may play an important role in the development of social competence and emotional health.

Studies of observed triadic family relationships are necessarily more complex than studies of the mother—child or father—child relationship and have been conducted only rarely. One reason for this may be the difficulty of developing procedures for analysing triadic relationships. However, a growing number of studies point to the importance of triadic relationships and processes. Based on a study by Gable, Belsky, and Crnic (1992), a number of research teams have sought to better define the factors influencing family processes. The studies differentiate between parental behaviour (in the parent—child dyad), marital quality (marital satisfaction or dissatisfaction; way in which marital partners resolve conflicts), and co-parenting (mutual parental support and involvement in interaction with the child). McHale (1995), for instance, developed a rating system for play situations in the family triad. McHale’s findings support separate constructs for co-parenting and marital distress: Maritally distressed parents of girls more commonly displayed discrepant levels of co-parenting behaviour in the triad, whereas distressed parents of boys were more likely to show hostile-competitive parenting involvement.

An experimental method for the standardized observation of early triadic family behaviour has been developed by Elisabeth Fivaz-Depeursinge and colleagues (Corboz-Warnery, Fivaz-Depeursinge, Gertsch-Bettens, & Favez, 1993; Fivaz-Depeursinge & Corboz-Warnery, 1999). Using the method they call Lausanne Trilogue Play (LTP), their detailed analyses show that even very young infants at the age of 4 months subtly contribute to shaping triadic interaction. High quality triadic interaction can develop only when all three partners work as a team (see Fivaz-Depeursinge et al., 1994). This complex interaction can be divided into four, hierarchically structured functions: participation, organization, focalization, and affective contact (Frascarolo, Favez, Carneiro, & Fivaz-Depeursinge, 2004).

Due to the small number of research studies on observed family level behaviour, there are only very few longitudinal studies available on observable triadic family processes and their influence on children’s development. McHale and Rasmussen (1998) found several long-term influences of triadic processes in the family group and the beneficial effect of co-parenting on the development of the child. Co-parental and family group
level dynamics were found to be significant predictors of aggressive behaviour and anxiety in children at age three. The degree of hostility–competitiveness in parental behaviour was found to be decisive.

Von Klitzing and Bürgin (2005; von Klitzing, Simoni, Amsler, & Bürgin, 1999a; von Klitzing, Simoni, & Bürgin, 1999b) complemented the research on triadic family functioning by examining the representational aspect before the child is born. The thesis that relationship patterns are transmitted from one generation to the next is a central one in the psychoanalytical literature (for example, Bowlby, 1973, 1988; Emde, 1988). Attachment research has focused for years on the topic of transgenerational transmission of attachment patterns. In the present study, we define Triadic Capacity as the capacity of mothers and fathers to envision their future family relationships without excluding either themselves or their partners from the relationship with the child. In a previous project, an interview was developed for assessment of Triadic Capacity in expectant parents (see Bürgin & von Klitzing, 1995; von Klitzing, Antusch, Amsler, & Bürgin, 1995). The semi-structured interview is conducted with both mother and father or, more rarely, with mothers alone. The object is to assess parents’ capacity and willingness to enter into a family relationship, that is, to integrate the child into their lives and their relationship with their partner at the level of mental representations. The topics explored by the interview are childhood experiences, genesis and emotional course of pregnancy, the experiences of feeling fetal movements and ultrasound examinations, mental representations of the unborn child, changes in the marital relationship, expectations and imaginings regarding future family relationships, and the role of the grandparents-to-be. The interviews are coded following a clinically oriented coding system (von Klitzing, 1996). In addition to evaluating the narrative contents, the rating assesses coherence of the narrative, flexibility of ideas, hopes, and expectations, marital dynamics, and relationship dynamics during the interview itself. A previous study (Perren, von Wyl, Simoni, Stadlmayr, Bürgin, & von Klitzing, 2003) established the negative impact of parental psychiatric disorders on Triadic Capacity. Additionally, Triadic Capacity proved to be a reasonably stable dimension (prenatal assessment/assessment 1 year after birth, $r = .75$; von Klitzing et al., 1999b).

In triadic interactions between father, mother, and child, parental mental representations of family relations interact with the infant’s handling of the triadic family interactions. A few studies have demonstrated an association between parental prenatal representations of future family relations and postnatal family development. Von Klitzing et al. (1999b) showed that triadic relational capacities assessed prior to the birth of the child predicted the quality of triadic interaction when the child was 4 month old. Carneiro, Corboz-Warnery, and Fivaz-Depeursinge (2006) recently found comparable
associations. But do triadic relational capacities assessed before the child is
born also have predictive value for aspects of child behaviour? In a
longitudinal study of 41 families with their firstborn children, von Klitzing
and Bürgin (2005) could not demonstrate that prenatal Triadic Capacity
predicted 1-year-old children’s regulatory capacity in a separation and
reunion situation with both parents. However, Triadic Capacity was
significantly negatively correlated with the number of children’s externaliz-
ing problems at preschool age, as rated by mothers. Additionally, Triadic
Capacity was significantly positively correlated with children’s narrative
coherence in a narrative assessment at preschool age.

Research questions and hypotheses

The main aim of the present study was to analyse, in a longitudinal
prospective study design, associations between parents’ representations of
future family relationships (Triadic Capacity) assessed during pregnancy
(Time 1), the quality of familial triadic interaction (Trilogue Quality) when
the child is 4 months old (Time 2), and several indices of the child’s strengths
and difficulties at age three (Time 3). In order to control triadic family
variables as well as child outcome variables for important family risk factors,
we assessed in addition parents’ global psychological distress, education
level, and marital quality as providing information on family stress.

In a first step we replicated associations found in earlier studies (Carneiro
et al., 2006; von Klitzing et al., 1999b) and hypothesized that parental
Triadic Capacity before the birth of the child is prospectively related to
Trilogue Quality in the family. To rule out the possibility that the
associations are due to third variables, such as parents’ psychological
distress, education level, and marital quality, we first looked at whether
those factors (assessed before the birth of the child) were related to prenatal
Triadic Capacity and/or Trilogue Quality.

In a second step we analysed the associations between the different
variables of children’s strengths and difficulties assessed at age three. In
order to obtain a differentiated picture of the children’s strengths and
difficulties, we utilized a combination of methods: an interview with the
parents, a parents’ questionnaire, and observation of a play interaction. We
expected that children with higher scores on measures of strengths would
exhibit less difficult behaviour, as evidenced by internalizing and externaliz-
ing symptoms. Additionally, we expected to find associations between
different measurements of children’s strengths as well as between different
measurements of children’s difficulties.

Next, we hypothesized that parental Triadic Capacity before the birth of
the child and family’s Trilogue Quality 4 months after birth would account
for variability in the child’s strengths and difficulties at age three over and
above the effects of family stress factors assessed before birth. Specifically, we expected to find that (a) high scores on Triadic Capacity and Trilogue Quality would be associated with children’s strengths and (b) low scores on Triadic Capacity and Trilogue Quality would be associated with children’s difficulties.

**METHOD**

**Procedure**

The present study is part of an ongoing prospective longitudinal study of 80 families and their firstborn infants and uses some of the collected data. The local Research Ethics Committee approved of all the steps of this longitudinal study. Figure 1 provides an overview of all measures and time points of the measurements. At Time 1 (before the birth) fifty-six couples and twenty-four mothers alone took part in the Triadic Interview. Parents also completed several questionnaires capturing psychological distress, perceptions of marriage, and socio-demographic variables. At Time 2 (when the children were 4 months of age), the family was videotaped during a standardized play interaction (Lausanne Trilogue Play; LTP) in our laboratory, and the parents again filled out questionnaires. Forty-eight of the fifty-six families that had participated at Time 1 participated in the LTP

![Figure 1](image_url)  
*Figure 1. Profile of measurements, time points, and number of families participating: Time 1 (before child born), Time 2 (child age 4 months), Time 3 (child age three). RABI = Rochester Adaptive Behaviour Inventory, FEAS = Functional Emotional Assessment Scale.*
with their 4-month-old children; eight families declines participation. Eight of the fathers who had not taken part in the Triadic Interview at Time 1 agreed to participate in the LTP together with their wife and child at Time 2; the remaining sixteen fathers (or families) declined to participate. When the children were 3 years old (Time 3), we visited the families at home. In order to gather broad information on the children’s development, we used three different instruments: a videotaped interview with both parents about the child’s adjustment, a videotaped family play situation, and questionnaires completed by the parents on their perceptions of the child and covering any changes in family life that had occurred since Time 1, such as the birth of siblings or divorce of the parents. At Time 3, 44 of the 48 families with complete data set thus far and 25 of the 32 families with incomplete data set thus far participated. Thus, the complete sample with a complete data set contained 44 families, and the incomplete sample with an incomplete data set contained 36 families.

Participants

Eighty families expecting their first child participated (firstborn sons: \(n = 41\) or daughters: \(n = 39\); in the case of twin births, only the firstborn twin participated: \(n = 7\)). The participants were assessed at three points in time: during pregnancy (Time 1), when the child was 4 months of age (Time 2), and when the child was 3 years old (Time 3). The families were recruited by the staff of the University Women’s Hospital Basel or referred by private gynaecologists in Basel, Switzerland. Due to the specialization of the university hospital in clinically high-risk pregnancies, the prevalence of psychosocial or biological risk factors is higher than in the general population.

At the time of pregnancy, the parents had been living together for 6.3 years \((SD = 3.9, \text{min.} = 0, \text{max.} = 15)\), and 57 of the couples were married (71%). The mean age of mothers was 30.6 years \((SD = 5.2, \text{min.} = 15, \text{max.} = 40)\); the mean age of fathers was 32.8 years \((SD = 4.9, \text{min.} = 20, \text{max.} = 44)\). The only inclusion criterion was the ability to speak and understand German.

While 18 mothers (22.5%) and 24 fathers (30%) had no professional education, 62 mothers and 56 fathers had professional education on different levels. At Time 3, 10 of the remaining 69 participating couples had separated. The children of separated couples lived with their mothers, but almost all of them had regular contact with their fathers. Twenty-seven families had a second child.

To specify the characteristics of the complete sample \((n = 44)\), we compared it to the families that participated only in part (incomplete sample: \(n = 36\)). Table 1 shows the sociodemographic characteristics of
the families in the complete sample and the incomplete sample. Although just a few of the differences between the two groups were significant, all of the scores indicated that the incomplete sample contained more burdened families, e.g., the teenage mother (15 years old) belonged to the incomplete sample. In 16% of the families of the complete sample and in 33% of the families in the incomplete sample, one or both parents were foreign nationals. In the complete sample, 6.8% of the families had twins; in the incomplete sample 11.1%. In addition, at Time 1 (during pregnancy) 100% of the couples in the complete sample were engaged, but only 92% in the incomplete sample; 75% of the couples in the complete sample were married, and 67% of couples in the incomplete sample were married. Finally, in the complete sample fewer mothers (20.5%) and fathers (27%) lacked professional education; in the incomplete sample 25% of the mothers and 33% of the fathers had no professional education. But a significantly greater percentage of families in the incomplete sample had a lower family education level (either both parents or one parent without professional education). At Time 3, in 4 of the 44 families in the complete sample, and in 7 of the remaining 25 families in the incomplete sample, the parents had separated (the differences are nearly significant).

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Comparison of complete sample and incomplete sample on demographic characteristics at assessment point “pregnancy”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete sample (n = 44)</td>
</tr>
<tr>
<td></td>
<td>M (SD)</td>
</tr>
<tr>
<td>Child gender (% male)</td>
<td>55</td>
</tr>
<tr>
<td>One/both parents foreign national†</td>
<td>16</td>
</tr>
<tr>
<td>Twin birth</td>
<td>7</td>
</tr>
<tr>
<td>Duration partnership</td>
<td>6.23 (3.94)</td>
</tr>
<tr>
<td>Engaged as couple (%)</td>
<td>100</td>
</tr>
<tr>
<td>Marital status (% married)</td>
<td>75</td>
</tr>
<tr>
<td>Mother age</td>
<td>30.68 (3.99)</td>
</tr>
<tr>
<td>Father age</td>
<td>32.61 (4.64)</td>
</tr>
<tr>
<td>Education mother: lower two levels</td>
<td>21</td>
</tr>
<tr>
<td>Education father: lower two levels</td>
<td>27</td>
</tr>
<tr>
<td>Educational status family: lower two levels**</td>
<td>24</td>
</tr>
</tbody>
</table>

*Note: †p < .10; **p < .01.*
Measures at Time 1 (before birth of the child)

**Triadic Capacity.** We define Triadic Capacity as the capacity of mothers and fathers to conceptualize their future family relationships without excluding either themselves or their partners from the relationship with the child. To assess Triadic Capacity before the birth of the child, we used a semi-structured psychodynamic interview with both parents that our research group developed in previous projects (see Bürgin & von Klitzing, 1995; von Klitzing et al., 1995). This semi-structured interview, which lasted about two hours, was conducted with mother and father together (or, in the incomplete sample, often with mother alone). All of the interviews were conducted by the same, clinically experienced female interviewer (HS) and videotaped. The interview is designed to assess parents’ capacity and willingness to enter into a family relationship, that is, to integrate the child into their relationship with their partner at the level of mental representations. The topics explored by the interview are childhood experiences, development and emotional course of pregnancy, the experiences of feeling fetal movements and ultrasound examinations, mental representations concerning the unborn child, changes in the marital relationship, and expectations and imaginations regarding future family relationships and the role of the grandparents-to-be.

The interviewer plus two extensively trained independent raters, who were blind to the other relevant details of the participants, coded all interviews (von Klitzing, 1996). The rating on five, 5-point scaled dimensions represents the various facets of Triadic Capacity: (1) quality of personal functioning and partnership dynamics; (2) flexibility of mental representations of the unborn child; (3) quality of the inner triadic scene concerning the future family relationship; (4) quality of parental dialogue; and (5) narrative coherence of parents’ descriptions of their own (triadic) childhood experiences. For the purposes of the present report, we used only the mean score of the five dimensions to establish the Triadic Capacity score.

Ratings were carried out for mothers and fathers separately. Interrater reliability of the mean score Triadic Capacity was estimated. Two-way, average measure intra-class correlations were .84 for mothers and .81 for fathers. Of the 80 interviews, there were 5 scores of mothers’ Triadic Capacity (6.2%) and 3 scores of fathers’ Triadic Capacity (5.3%) with differences between the raters of more than one scale point. In these cases, three raters performed a consensus rating. For all other scores, the ratings by the three raters were averaged. High scores on this scale reflect high capacity, while low scores indicate low capacity to form triadic interactions between mother, father, and child. Validity of the Triadic Interview has been established in previous studies (von Klitzing et al., 1999a, 1999b).
**Parental psychological distress.** We used the German version (Franke, 1995) of the *Symptom Checklist-90-Revised* (SCL-90-R; Derogatis, 1994). Hessel, Schumacher, Geyer, and Brähler (2001) found high intercorrelations between the nine original subscales; a general factor may be present. Therefore, we used only the Global Severity Index (GSI) as a summary of the test. Scores were transformed into T-values based on sex norms ($M = 50$, $SD = 10$). As we were interested in the effect of educational status, we did not apply the education norms. The norms are based on the scores of a normative sample consisting of 501 women and 505 men from Germany from various educational backgrounds (similar to our Swiss population; see Franke, 1995). Fathers’ scores were significantly lower than the normative sample for men, and mothers had average scores (GSI-father: $M = 44.5$, $SD = 11.2$; GSI-mother: $M = 49.9$, $SD = 12.8$).

**Marital quality.** The participants also completed a *questionnaire on marital quality* (PFB; Hahlweg, 1988, 1996). The questionnaire consists of three scales: conflict management, tenderness, and community/communication. The sum score of this diagnostic instrument can be used to assess overall marital quality. Higher scores signify greater marital satisfaction. The scores of fathers and mothers were significantly associated ($r = .83$, $p = .000$).

**Measures at Time 2 (child age 4 months)**

**Trilogue Quality.** To assess triadic family interaction, we used the Lausanne Trilogue Play scenario (LPT; Fivaz-Depeursinge et al., 1999; Corboz-Warnery et al., 1993). This standardized observation scenario taps various triadic situations with dyadic or triadic interactions among mother, father, and 4-month-old infant. The parents sit facing their child, who sits in an infant seat. First, each parent plays with the child individually; then both parents together play with the child. Two cameras videotape the infant and parents.

Our coding method makes use of observable behavioural elements and the content of speech and emotional expression. Using a coding manual, dialogues between father or mother and the infant and family triadic interaction (Trilogue Quality) among all three are assessed on visual analogue scales with defined end points (raging from 0 to 10). Spitz (1963, p. 153) defined dialogue as an “emotion-charged circular process of action and response within a parent–child dyad, a continuous mutually stimulating feedback circuit”. Vocalization, facial expressions, gestures, body language, and stimulation are all important in the early stages of development. The concept of dialogue is extended to a concept of trilogue.
The feedback circuit now takes place between three partners. Three dimensions are important for Trilogue Quality: reciprocal activity, emotional participation, and flexibility. The rater first codes the qualities of the parent–child dialogue and then the capacity for trilogue of father, mother, and infant separately. Finally, the quality of the whole-family trilogue is assessed. This assessment is a combination of the individual contribution of each participant but also takes into consideration how many successful feedback circuits took place between the three partners. For the purposes of the present report we use only this family score of Trilogue Quality. A high score implies considerable mutual activity, high internal relating, and considerable flexibility on the part of all participants. Two raters coded all interviews. Intra-class correlation was .75 for family Trilogue Quality.

**Measures at Time 3 (child age three)**

*Children's social competence and symptoms (parent interviews).* The *Rochester Adaptive Behaviour Inventory* (RABI; Jones, 1977; Seifer, Sameroff, & Jones, 1981) is a semi-structured interview administered to parents of children aged 2 through 6 years. It yields aspects of children’s co-operative behaviour (items include “With babysitters or other caretakers, she/he is nice and co-operative”; “She/he is able to accept prohibitions”; “She/he rarely has difficulty sharing toys and other playthings”) and symptoms behaviour (items include “She/he is a fearful child so that she/he is afraid of things”; “Would you describe her/him as a tense, jittery, or nervous child generally?” “Are there times when she/he seems to be unhappy or down so that nothing much seems to please or interest her/him?” The items are subdivided in 12 different scales. The average intra-class correlation between two raters of the 12 scales was .89 (ICC range for the different scales was between .71 and .95). For further analyses, we built two main categories: co-operative behaviour and symptoms. Items that failed to achieve a discrimination power (part–whole correlation) of <.300 (Bortz & Döring, 1995) were eliminated from the categories. In the end, the co-operation patterns consisted of 18 of the 19 items of the two co-operation scales. The symptom patterns consisted of 21 items out of 43 items. The 3 items of the friendship scale did not enter into the new patterns.

*Internalizing and externalizing behaviour problems (parent questionnaire).* The *Child Behaviour Checklist* (CBCL/2–3; Achenbach, 1992) is a widely used clinical instrument designed to assess in a standardized format the behaviour problems and social competencies of children as reported by parents. In this study, mothers completed the
checklist. The 99 items focus on child behaviour related to social and emotional problems. The externalizing and internalizing scales were used.

Emotional functioning (play interactions). The Functional Emotional Assessment Scale (FEAS; DeGangi & Greenspan, 2000) is a method used to assess infants, toddlers, and young children from 7 months through 4 years and their caregivers. It has six age-specific versions. We used the version for 3- to 4-year-old children. Parents are asked to play with their child as they might do in everyday play situations using three different kinds of toys: symbolic toys, tactile toys, and toys involving large movement activities. The semi-structured family play interaction session of about 30 minutes is videotaped. The FEAS focuses on the child’s core emotional and social capacities at each stage in his or her development. The items are based upon an ego psychology developmental framework described by Greenspan (1992). The items assess the child on six different levels of emotional and social development: (1) regulation and interest in the world; (2) forming relationships or attachment; (3) intentional two-way communication; (4) development of a complex sense of self (e.g., behavioural organization and elaboration); (5) representational capacity and elaboration of symbolic thinking; and (6) emotional thinking, or the development and expression of thematic play.

The ratings can be summed to obtain dimension scores (3 to 8 items per dimension) and a combined total score. The FEAS combined child total score (ranking from 0 to 66) yields information on the child’s core emotional functioning. All 46 FEAS play situations were rated by the same child psychologist, who was blind to all other material. Interrater reliability was tested in nine play situations that were not part of this sample and revealed quite high two-way, average measure intra-class correlations (total score were .88 for parents and .80 for children).

RESULTS

The results are presented in the following three main sections. The first section examines intercorrelations among predictor variables (with a main focus on Triadic Capacity and Trilogue Quality) and among outcome variables. The second section summarizes associations between family scores—triadic family aspects (Triadic Capacity, Trilogue Quality) and family risk factors (psychological distress, marital quality, educational level)—and later indices of the child’s strengths and difficulties. First, we calculated correlations. Second, we calculated regression analyses to examine whether triadic family aspects explain additional variance in the child outcome measures. Finally, in the third explorative section, we compare the complete sample of 44 families to the incomplete sample of 36 families.
Are parental psychological distress, marital quality, and education level associated with triadic family aspects?

We computed Pearson correlations to examine whether mothers’ and fathers’ psychological distress, marital quality, and education level are associated with mothers’ and fathers’ Triadic Capacity and family Trilogue Quality. Results indicated that mothers’ psychological distress (SCL-90-R/GSI), marital quality, and education level were not associated with mothers’ Triadic Capacity (see Table 2). Fathers’ psychological distress (SCL-90-R/GSI) showed a weak negative correlation, and fathers’ marital quality a weak positive correlation, to fathers’ Triadic Capacity. Fathers’ education level was not associated with fathers’ Triadic Capacity. The associations between psychological distress (SCL-90-R/GSI), marital quality, and education level (all assessed before the child was born) and families’ Trilogue Quality (child 4 months) showed the same pattern: mothers’ characteristics and fathers’ education level showed no correlation, but fathers’ psychological distress (SCL-90-R/GSI) showed a negative correlation, and fathers’ marital quality a positive correlation, with families’ Trilogue Quality.

Correlations between Triadic Capacity (Time 1) and Trilogue Quality (Time 2)

 Mothers’ and fathers’ scores on Triadic Capacity before the child was born correlated significantly (Pearson $r = .68$, $p < .01$). Mothers’ Triadic Capacity before the child was born correlated significantly with Trilogue Quality (LTP) when the child was 4 months old (Pearson $r = .39$, $p < .01$), and fathers’ Triadic Capacity at Time 1 correlated significantly with Trilogue

| TABLE 2 |

| Correlations among parental risk factors and triadic aspects of family functioning |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                 | Mother          | Father          |
|                                 | $SCL$ | $MQ$ | $EL$ | $TC$ | $SCL$ | $MQ$ | $EL$ | $TC$ |
| Mother/father ($n = 44$):       |       |       |     |     |       |       |     |     |
| SCL-90-R/GSI                   | –     | –     |     |     | –     | –     |     |     |
| Marital quality (MQ)           | $- .24^+$ | –     |     |     | $- .16$ | –     |     |     |
| Educational level (EL)         | $- .50^{**}$ | $- .02$ | –     |     | $0.05$ | $0.07$ | –     |     |
| Triadic Capacity (TC)          | $- .23$ | $0.24$ | $0.20$ | –     | $- .28^+$ | $0.28^+$ | $0.18$ | –     |
| Family:                        |           |           |     |     |           |           |     |     |
| Trilogue Quality               | $- .19$ | $0.22$ | $0.08$ | $0.39^{**}$ | $- .28^+$ | $0.28^+$ | $0.02$ | $0.40^{**}$ |

Note: $^*p < .10; ^{**}p < .01$ (bold numbers).
Quality (LTP) at Time 2 (Pearson $r = .40$, $p < .01$). Parents who already during pregnancy include in their minds themselves and their partner in the relationship to the child also present as a family (together with the child) a higher quality of triadic interaction as observed in the play sessions.

**Are different assessments of child’s strengths and difficulties related?**

We computed Pearson correlations to analyse associations among children’s emotional functioning score (FEAS), co-operation score (RABI), symptoms score (RABI), and CBCL internalizing and externalizing behaviour (see Table 3). The correlation analyses confirmed most of the hypothesized associations: Children’s co-operation scores (RABI) were significantly negatively correlated with children’s symptoms scores (RABI) and children’s CBCL externalizing behaviour, but not with CBCL internalizing behaviour. Significant positive correlations were found between children’s symptoms scores (RABI) and CBCL externalizing and internalizing behaviour. Children’s emotional functioning scores (FEAS), however, were not associated with any other scores of children’s strengths and difficulties.

**Do Triadic Capacity (Time 1), family risk factors (Time 1), and family’s Trilogue Quality (Time 2) predict children’s strengths and difficulties at Time 3?**

*Correlations.* First, marital quality for men and for women were summed to form a single marital quality composite, because they correlated highly ($r = .83$, $p < .001$). As shown in Table 4, children’s emotional functioning scores (FEAS) at age three were significantly correlated with family Trilogue Quality. Children’s co-operation scores (RABI) were significantly negatively correlated with mother’s psychological distress

### TABLE 3

<table>
<thead>
<tr>
<th></th>
<th>FEAS</th>
<th>RABI co-operation</th>
<th>RABI symptoms</th>
<th>CBCL ext.</th>
<th>CBCL int.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEAS ($n = 42$)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RABI co-operation ($n = 44$)</td>
<td>–.10</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>RABI symptoms ($n = 44$)</td>
<td>–.09</td>
<td>–.43**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBCL ext. ($n = 43$)</td>
<td>.03</td>
<td>–.62**</td>
<td>.53**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>CBCL int. ($n = 43$)</td>
<td>.03</td>
<td>–.25</td>
<td>.65**</td>
<td>.61**</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note:* FEAS = Functional Emotional Assessment Scale; RABI = Rochester Adaptive Behavior Inventory; CBCL = Child Behavior Checklist. **$p < .01$ (bold numbers).
(SCL-90-R/GSI) before the child was born and significantly positively correlated with mother’s Triadic Capacity and father’s education level. Children’s symptoms scores (RABI) were significantly negatively correlated with fathers’ education level; nearly negatively significant is the correlation with family Trilogue Quality ($p = .06$). Children’s CBCL externalizing behaviour was significantly correlated with mothers’ psychological distress (SCL-90-R/GSI) before the child was born and significantly negatively correlated with fathers’ education level. Finally, CBCL internalizing behaviour was only negatively correlated with fathers’ education level.

**Regression analyses.** We then performed a series of regression analyses to determine whether Triadic Capacity before the child was born and family Trilogue Quality when the child was 4 months old account for variability in each score of children’s strengths and difficulties at age three over and above the effects of prenatal family stress factors. In the first step we entered family stress factors as a predictor set, in the following order: mothers’ education level, fathers’ education level, mothers’ SCL-90-R/GSI, fathers’ SCL-90-R/GSI, and couple’s marital quality. The family triadic scores—mothers’ and fathers’ Triadic Capacity (before child was born) and family Trilogue Quality (child age 4 months)—were entered second. Table 5 summarizes the findings of these regression analyses. As Table 5 shows, family stress factors assessed before the child was born did not explain a statistically significant proportion of the variance of children’s emotional functioning scores.
(FEAS) at age three. Entered as predictor set in step 2, the family triadic scores explained a statistically nearly significant additional 17% of the variance in children’s emotional functioning scores (FEAS). But only family Trilogue Quality four months after the child was born was a significant predictor of children’s emotional functioning scores (FEAS; \( p < .05 \)). In children’s RABI co-operation scores, family stress factors assessed before the child was born explained a statistically significant proportion of 29% of the variance \((p < .05)\). Inspection of the family stress variables indicated that mothers’ psychological distress scores (SCL-90-R/GSI) had a significant impact on children’s RABI co-operation scores \((p < .01)\). Entered as predictor set in step 2, the family triadic scores explained an additional 6% of the variance in RABI co-operation scores. For children’s RABI symptoms scores, family stress factors assessed before the child was born explained 17% of the variance. Although the whole model was not significant, fathers’ education level was a significant predictor of RABI symptoms scores.

### Table 5
Summary of statistics of regression models: predicting indices of different scores of child’s strengths and difficulties at 3 years from family stress factors, mothers’ and fathers’ Triadic Capacity (prenatal), and family Trilogue Quality (4 month)

<table>
<thead>
<tr>
<th></th>
<th>FEAS</th>
<th>RABI co-op.</th>
<th>RABI symptoms</th>
<th>CBCL ext.</th>
<th>CBCL int.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational level: mother</td>
<td>-.19</td>
<td>.01</td>
<td>.12</td>
<td>.03</td>
<td>.35</td>
</tr>
<tr>
<td>Educational level: father</td>
<td>.03</td>
<td>.23</td>
<td>-.35**</td>
<td>-.55***</td>
<td>-.42*</td>
</tr>
<tr>
<td>SCL-90-R/GSI: mother</td>
<td>-.07</td>
<td>-.44**</td>
<td>.20</td>
<td>.19</td>
<td>.18</td>
</tr>
<tr>
<td>SCL-90-R/GSI: father</td>
<td>.17</td>
<td>.01</td>
<td>-.08</td>
<td>.05</td>
<td>.10</td>
</tr>
<tr>
<td>Marital quality: couple m</td>
<td>-.02</td>
<td>-.10</td>
<td>.10</td>
<td>.04</td>
<td>.17</td>
</tr>
<tr>
<td>( R^2 ) for step 1</td>
<td>.06</td>
<td>.29</td>
<td>.17</td>
<td>.39</td>
<td>.23</td>
</tr>
<tr>
<td>( F ) for step 1</td>
<td>0.48</td>
<td>2.95*</td>
<td>1.45</td>
<td>4.41**</td>
<td>2.09</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational level: mother</td>
<td>-.25</td>
<td>-.03</td>
<td>.15</td>
<td>.05</td>
<td>.34</td>
</tr>
<tr>
<td>Educational level: father</td>
<td>-.00</td>
<td>.24</td>
<td>-.34**</td>
<td>-.56***</td>
<td>-.41*</td>
</tr>
<tr>
<td>SCL-90-R/GSI: mother</td>
<td>-.09</td>
<td>-.43*</td>
<td>.18</td>
<td>.18</td>
<td>.19</td>
</tr>
<tr>
<td>SCL-90-R/GSI: father</td>
<td>.20</td>
<td>.04</td>
<td>-.16</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td>Marital quality: couple m</td>
<td>-.18</td>
<td>-.13</td>
<td>.20</td>
<td>.07</td>
<td>.17</td>
</tr>
<tr>
<td>Triadic Capacity: mother</td>
<td>-.26</td>
<td>.29</td>
<td>-.02</td>
<td>-.13</td>
<td>.08</td>
</tr>
<tr>
<td>Triadic Capacity: father</td>
<td>.12</td>
<td>-.03</td>
<td>-.11</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>Trilogue Quality: family (4 month)</td>
<td>.47*</td>
<td>-.10</td>
<td>-.32</td>
<td>-.12</td>
<td>-.15</td>
</tr>
<tr>
<td>( \Delta R^2 ) for step 2</td>
<td>.17</td>
<td>.06</td>
<td>.11</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>( F \Delta ) for step 2</td>
<td>2.38*</td>
<td>1.04</td>
<td>1.66</td>
<td>0.52</td>
<td>0.30</td>
</tr>
</tbody>
</table>

**Note**: \( n = 44 \) (complete sample). \( ^* p < .10; ^* p < .05; ** p < .001; *** p < .001. \)
The family triadic factors entered as predictor set in step 2 explained an additional 11% of the variance in RABI symptoms scores. Again, family Trilogue Quality had a nearly significant negative association with RABI symptoms scores \( p < .10 \). Turning to CBCL externalizing and internalizing behaviour at age three: family stress factors assessed before the child was born explained 39% of the variance \( p < .01 \) in CBCL externalizing behaviour and 23% of CBCL internalizing behaviour. Checking the family stress factors, only fathers’ education level was a significant predictor of CBCL externalizing behaviour \( p < .01 \), such that lower fathers’ education level was related to higher CBCL externalizing behaviour. Similarly, CBCL internalizing behaviour was significantly predicted by fathers’ education level \( p < .05 \). Also mothers’ education level almost significantly predicted CBCL internalizing behaviour, but mothers’ higher education levels were related to higher CBCL externalizing behaviour \( p < .10 \). Family, triadic scores entered as step 2 could only explain a marginal part of variance in CBCL externalizing and internalizing behaviours.

Comparison of families in the complete sample (full participation) and families in the incomplete sample (only partial participation)

We computed means and standard deviations for predictor and dependent variables, grouped by complete sample and incomplete sample. Results are presented in Table 6. To verify that the two samples do not differ in specific criteria, sample \( t \)-tests were calculated. We highlight the fact that although the differences for all the predictor variables were not significant, the families in the incomplete sample had higher scores on mothers’ and fathers’ psychological distress (SCL-90-R/GSI) and lower scores on marital quality and Triadic Capacity. No differences were found for the following outcome variables: emotional functioning score (FEAS), co-operative behaviour score (RABI), CBCL externalizing behaviour, and CBCL internalizing behaviour. Significant differences were found for children’s symptoms scores (RABI); complete sample \( M = 68.80, SD = 6.68 \); incomplete sample \( M = 72.48, SD = 5.65, t(66) = 2.32, p = .02 \). Because only eight families in the incomplete sample participated in the Trilogue Play, no \( t \)-tests were calculated for family Trilogue Quality.

Next we performed Pearson correlations between predictor variables and outcome variables for the incomplete sample. Pearson correlations showed that none of the significant associations found in the complete sample (see Table 4) could be found in the incomplete sample. We found a significant positive correlation between mothers’ psychological distress (SCL-90-R/GSI) and children’s co-operation scores (RABI) in the incomplete sample \( p < .05 \), while in the complete sample this correlation was significantly negative.
Finally, just one of the correlations between different scores of children’s strengths and difficulties found in the complete sample could be confirmed in the incomplete sample: co-operative behaviour (RABI) and CBCL externalizing behaviour were significant negatively correlated.

**DISCUSSION**

The concept of triadic family interaction as a research entity separate and distinct from the mother–child or father–child dyad has received relatively little attention in developmental psychology. Even more rarely investigated is the possible importance of parental mental representations of family relationships for the development of the child. The findings of the present prospective, longitudinal study analyse the relation between parental representations of the triadic relationship (Triadic Capacity) and observed triadic interaction between mother, father, and 4-month-old child (Trilogue Quality). The framework developed in this study attempts to explain how these aspects of family functioning can set the stage for later child functioning.

First, we found that the better the mothers’ and fathers’ Triadic Capacity is before the child is born (meaning, the better able expectant parents are to

**TABLE 6**

<table>
<thead>
<tr>
<th>Subsamples</th>
<th>Complete (n = 44)</th>
<th>Incomplete (n ≤ 36)</th>
<th>t-value</th>
<th>Significance (two tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCL-90-R/GSI</td>
<td>49.9 (9.7)</td>
<td>52.8 (12.8)</td>
<td>-1.1</td>
<td>ns</td>
</tr>
<tr>
<td>Marital Quality</td>
<td>59.7 (10.1)</td>
<td>55.0 (14.2)</td>
<td>1.7</td>
<td>ns</td>
</tr>
<tr>
<td>Triadic Capacity</td>
<td>3.4 (0.5)</td>
<td>3.2 (0.5)</td>
<td>1.9</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCL-90-R/GSI</td>
<td>44.5 (11.2)</td>
<td>42.1 (13.5)</td>
<td>0.7</td>
<td>ns</td>
</tr>
<tr>
<td>Marital Quality</td>
<td>57.3 (9.7)</td>
<td>58.3 (10.2)</td>
<td>-0.3</td>
<td>ns</td>
</tr>
<tr>
<td>Triadic Capacity</td>
<td>3.5 (0.4)</td>
<td>3.5 (0.4)</td>
<td>-0.1</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Family:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trilogue Quality</td>
<td>3.2 (0.7)</td>
<td>3.0 (0.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Child outcome variables:**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FEAS</td>
<td>53.2 (6.4)</td>
<td>52.0 (5.5)</td>
<td>-0.7</td>
<td>ns</td>
</tr>
<tr>
<td>RABI co-operation</td>
<td>71.5 (8.9)</td>
<td>68.4 (5.2)</td>
<td>-1.6</td>
<td>ns</td>
</tr>
<tr>
<td>RABI symptoms</td>
<td>68.8 (6.7)</td>
<td>72.5 (5.6)</td>
<td>2.3</td>
<td>p &lt; .05</td>
</tr>
<tr>
<td>CBCL ext. behaviour</td>
<td>11.6 (7.2)</td>
<td>11.0 (4.1)</td>
<td>-0.4</td>
<td>ns</td>
</tr>
<tr>
<td>CBCL int. behaviour</td>
<td>6.5 (4.3)</td>
<td>7.6 (4.4)</td>
<td>0.9</td>
<td>ns</td>
</tr>
</tbody>
</table>
integrate their future child into their dyadic relationship in their thoughts
without excluding themselves or their partner), the better the quality of
interaction between mother, father, and their 4-month-old child is. This
finding agrees with comparable findings in previous studies conducted by
our research group (von Klitzing et al., 1999b). Carneiro et al. (2006) also
found correlations between prenatal co-parenting (using a doll) and
postpartal triadic family interaction. Fonagy, Steele, and Steele (1991)
found that maternal attachment patterns classified during pregnancy
predicted attachment quality of the child in 75% of cases.

It is noteworthy that the statistical analyses showed no significant
correlations between our concepts of family functioning and the assessed
aspects of family risk factors. Triadic Capacity and Trilogue Quality can be
understood as an aspect of family functioning alongside marital quality.
Additionally, mothers’ and fathers’ Triadic Capacity and family Trilogue
Quality seem to be independent of their education levels and their
psychological distress.

This study was interested in different views and measures of children’s
strengths and difficulties. We found the expected associations between the
scores derived from the interview with the parents and the scores derived
from the questionnaire filled out by mothers, with the exception of the
association between co-operation behaviour and CBCL internalizing
behaviour. This reflects the consistency between those two measurements.
But the score derived from the observed child behaviour in a play situation
with parents was not coherent with the results of the interview and the
questionnaire. Whether this reflects a bias in how parents and external
observers rate children’s behaviour, or differences of children’s emotional
and social capacities in a play situation as opposed to their everyday
functioning, or simply random variation in the data is not yet clear.

The main goal of this study was to examine whether triadic family aspects
predict children’s later behaviour. We found that mothers’ prenatal Triadic
Capacity was associated with children’s co-operative behaviour at age three
as assessed by interview. We find this remarkable. First, there is an interval
of more than three years between the assessment points, and second, two
different assessment instruments were used. Parents’ Triadic Capacity bases
in parents’ subjective construct of how their child will fit into their future
family’s three-person relationship. Children’s co-operative behaviour at
three years of age was assessed using a structured interview with questions
about the child’s co-operation in the family (picking up toys without
supervision, acceptance of prohibitions, and so on) and co-operation with
others (such as with the babysitter). Children’s co-operative behaviour is
thus a measure of children’s adjustment in comparatively conflict-laden
situations. Astonishingly, Trilogue Quality at 4 months hardly explains any
additional variance. In other words, how co-operative children’s behaviour

is at age three is perhaps more affected by parents’ mental representations of their future family before their child is born and is less affected by actual family interaction in a play scenario when the child is 4 months old. A conceivable explanation is that parents’ representations of their relationships have a lasting quality and become effective particularly in stressful situations. In a play situation between parent and child (such as the one used in the assessment when the child was 4 months old), there is little potential for conflict; this may possibly better allow parents to interact with their children competently. Further, it should be considered whether the interview questions on the child’s adjustment mentioned above give indirect information on parental behaviour in conflict situations, that is, on the condition that children’s co-operative behaviour correlates with parenting behaviour. In that case, parents’ representations of family interaction would be important predictors of parents’ behaviour in conflict situations.

We also wanted to confirm whether mothers’ Triadic Capacity retained a significant association with children’s co-operative behaviour even after the variability it shared with family stress factors had been partialled out. The variability that mothers’ Triadic Capacity shared with mothers’ psychological distress appeared to be strong enough: after mothers’ psychological distress had been partialled, mothers’ Triadic Capacity lost the significant association with children’s co-operative behaviour.

Trilogue Quality at 4 months predicted children’s emotional functioning at age three (children’s core emotional and social capacities). Even though both of the two assessments were based on a family play scenario, this correlation seems to be important, for the assessments, methodology, and the ratings were different each time, and they were separated by a time interval of three years. Additionally, Trilogue Quality retained the significant association with children’s emotional functioning, even after family risk factors and Triadic Capacity had been partialled.

No relevant correlation could be shown between fathers’ Triadic Capacity and children’s co-operative behaviour. This finding of a lower influence of the fathers’ Triadic Capacity is comparable to a finding in a previous study (von Klitzing et al., 1999a). Similarly, no relevant associations could be shown between triadic family processes and children’s difficulties. This result is inconsistent with the findings of a previous study conducted by our research group (von Klitzing & Bürgin, 2005), where links were found between Triadic Capacity and the number of children’s externalizing problems. In that sample, members of the middle class and academic professions and good functioning families were markedly over-represented; possibly, associations between triadic family processes and children’s difficulties are revealed under those circumstances. In fact, also McHale and Rasmussen (1998) found no prospective correlations between family processes and degree of internalizing and externalizing problem
behaviour (CBCL) as assessed by parents. But they found the expected correlations when teachers assessed these behaviours. We will be collecting information from teachers as the next step in our own study, which will provide an informative complement to the assessments by mothers and may reveal new insights into these connections.

Of the assessed family risk factors, fathers’ education level and mothers’ psychological distress proved to be the only significant risk factors for children’s strengths and difficulties. Fathers’ education level was predictive for all scores of children’s behavioural difficulties (symptoms behaviour and CBCL externalizing and internalizing behaviour). Additionally, no other family risk factor could explain further variance if entered together in the regression analyses. For evaluating the impact of fathers’ education level, the findings of a natural experiment by Costello, Compton, Keeler, and Angold (2003) are interesting. They found that with unexpected supplemental income that moved families out of poverty (and for reasons that cannot be ascribed to family characteristics), children’s conduct and oppositional defiant disorders decreased. The change in family income did not affect anxiety or depression. Costello et al. (2003) concluded that the income intervention allowed parents to be more available to their children, and it was this that changed their children’s externalizing problem behaviour. Even though the life circumstances of the families participating in our study were not comparable, the authors’ conclusion aids interpretation of our own data, for a low education level usually means low income, which often entails increased stress.

Mothers’ psychological distress proved to be predictive for children’s co-operative behaviour and CBCL externalizing behaviour but surprisingly not for children’s CBCL internalizing behaviour. Additionally, mothers’ psychological distress lost its significant association with children’s externalizing behaviour after the variability it shared with fathers’ education level had been partialled. Only in the case of children’s co-operative behaviour was mothers’ psychological distress the only predictive risk factor. These associations stand out in a general landscape in which mothers’ mental disorders are considered to be the most important predictor of children’s maladjustment. Subsequent assessments of child’s adjustment in this longitudinal project may replicate these findings. But it is also possible that they depend on the age of the children at the time of assessment.

Finally, family risk factors did not have an impact on children’s emotional functioning. We have to consider that aspects like parent’s marital quality, psychological distress, and education level influence the manner in which they see and describe their children and thus suggest coherence and consistencies that do not actually exist. In the case of external rating of children’s behaviour, those consistencies disappear.
Taken together, these findings suggest not only coherence between triadic family functioning and children’s strengths, but also independence between triadic family functioning and children’s difficulties. Comparing family triads to other important predictors of child development and distinguishing representations of the family triad from family interaction seems fruitful and produced interesting results.

But we have to consider, that the consequences articulated for the complete sample start from the assumption that families show a similar profile across a number of measurements and the relations between them. In an explorative analysis of the data, we compared the associations found between family factors and children’s strengths and difficulties in the complete sample with the associations in the incomplete sample. As we saw in the description of the participants, according to socio-demographic data as well as the explorative analyses, family circumstances were less burdened in the complete sample. It is noteworthy that, nevertheless, the child outcome variables did not differ across the two samples. In the incomplete sample, none of the significant correlations found in the complete sample occurred. Contrary to the hypotheses, even, was the finding that mothers’ psychological distress symptoms predicted good co-operative behaviour in children. These children showed more co-operative, or more adaptive, behaviour the more that mothers suffered from psychological distress symptoms. This finding is possibly an indication of forced development under difficult family circumstances.

In the incomplete sample, there are apparently other factors than the assessed factors that are important for the development of the child. Other factors that have been demonstrated to be risk factors for single-parent families may have had a greater effect, such as, for example, conflicts in the parent–child relationship (Dunn, Deater-Deckard, Pickering, & O’Connor, 1998; O’Connor, Dunn, Jenkins, Pickering, & Rabash, 2001), less emotional support, cognitive stimulation, and supervision, and overall less involved parents (Carlson & Corcoran, 2001; McLanahan & Sandefur, 1994). In the incomplete sample marital separation of the parents was more frequent, and it seems reasonable also to conclude that some of the fathers in this sample tended to be somewhat less involved in family life.

In conclusion, this study points out that it is fruitful to investigate the influence of the family triad on children’s adjustment and to distinguish between represented and real-life family interactions, because each of them has its own influence. Moreover, the study suggests that various aspects of children’s adaptive behaviour should be taken into consideration. Our study revealed that our hypotheses could be confirmed in the group of families where two parents were involved, but not in the groups where fathers’ involvement was lacking or partial. The different patterns of interrelations suggest taking into account dimensional identity (von Eye & Bergman, 2003).
and thus further exploration of various possible developmental paths. Second, due to the relatively small number of cases, further possible influencing factors, such as the child’s gender, could not be considered separately in this study. Another limitation is that the children’s adjustment was assessed at only one point in time in their development. It would make sense to follow the development of the children longitudinally (as is planned for the continuation of the present study). Also, in further investigations it would be desirable to obtain more complete data for fathers. Finally, to make improved therapeutic intervention possible, the differentiation between represented and actual, real-life family and its specific impact might be very valuable.

REFERENCES


