Parenting and child adjustment after divorce: family relationship quality, parental stress, and child adjustment in post-divorce families
Hakvoort, E.M.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Family relationships and the psychosocial adjustment of school aged children in intact families

Abstract

This study investigated whether the quality of three family relationships (i.e., marital, parent–child, sibling) in intact families are associated with each other and with children's psychosocial adjustment. Data were collected by means of maternal and child reports (N = 88) using standardized instruments (i.e., Marital Satisfaction Scale, Strengths and Difficulties Questionnaire). The findings confirm associations between the marital and the parent–child relationship, and between the parent–child and the sibling relationship. Further, both father–child relationships and sibling relationships predict children's adjustment. Father–child conflicts contribute to children's problem behavior, while father–child acceptance and sibling affection contribute significantly to children's general self-esteem. However, contrary to previous studies no support was found for the association between marital relationship and sibling relationship, or for that between marital relationship quality and children's adjustment.

2.1 Introduction

According to the family system theory, a family can be considered a system. Within this system, three important kinds of family relationships (or “subsystems”) can be distinguished, namely the marital relationship, the parent–child relationship, and the sibling relationship. Family system theorists assert that an understanding of children’s functioning necessitates an understanding of family dynamics (Sameroff, 1994; Thelen & Smith, 1994). The quality of family relationships influences the functioning of the children, and vice versa (Cowan, Cohn, Cowan, & Pearson, 1996; Golombok, 2000). Furthermore, it is assumed that different family relationships mutually influence each other (e.g., Bronfenbrenner, 1979).

Most studies on family relationships and children's psychosocial adjustment have focused on only one or two of the above-mentioned relationships. The present study, however, investigated three family subsystems (marital relationship, parent–child relationships, and sibling relationship) and their associations with children's psychosocial adjustment.

2.1.1 Associations between family relationships

From a family systems perspective, emotions or behavior in a specific family subsystem might influence other subsystems within the family (Parke, 2004). Therefore, it can be assumed that family relationships are associated with each other. To understand the association between two or more family relationships, the literature frequently describes two perspectives, namely the spillover perspective and the compensatory perspective (Erel & Burman, 1995). According to the former perspective, emotions and behavior in one family subsystem ‘spill over’ to another subsystem. This implies a positive correlation between two family relationships; for example, when the relationship between parents is warm, the parent–child relationship is positive, or when the relationship between parents is hostile, the parent–child relationship is characterized by negativity. According to the compensatory perspective, emotions and behavior in one family subsystem compensate for the emotions and behaviors in another family subsystem. This implies a negative correlation between two family relationships, for instance, a warm relationship between siblings when the parent–child relationship is discordant, or vice versa. It might, of course, be possible that there is no significant association between two different relationships.

The interrelatedness between marital relationship and parent–child relationship has been assessed in several studies (see, e.g., the meta-analysis by Erel & Burman, 1995). Most of these studies support the spillover perspective and report a positive correlation between these two family relationships. It appears that a high level of marital quality is associated with a warm parent–child relationship (Fauchier & Margolin, 2004), and that a marital relationship characterized by conflict is correlated with a more negative parent–child relationship (Amato & Afifi, 2006; Dunn, O’Connor, & Cheng, 2005; Gerard, Krishnakumar, & Buehler, 2006; Kerig, Cowan, & Cowan, 1993, Vandewater & Lansford, 1998). However, a number of studies have shown more clear associations between father–child interaction and marital quality, than between mother–child relationship.
Family relationships and the psychosocial adjustment of school aged children in intact families

and marital quality (Belsky, Youngblade, Rovine, & Volling, 1991; Kerig, Cowan, & Cowan, 1993).

The relation between parent–child relationship and sibling relationship has been well studied; most studies support the spillover perspective and show a concordant association between these two relationships. Positive aspects of the parent–child relationship are related to positive aspects of the sibling relationship (Boer, Goedhart, & Treffers, 1992; Brody, Stoneman, & McCoy, 1994; Bryant & Crockenberg, 1980; Pike, Coldwell, & Dunn, 2005), while a parent–child relationship that is characterized by intrusive and over-controlling parenting is associated with conflict and aggression between siblings (Boer, Goedhart, & Treffers, 1992; Volling & Belsky, 1992). However, Byant and Crockenberg (1980) reported a contradictory finding that is more in line with the compensatory perspective: They found that maternal disregard was associated with an increase in prosocial behavior between sisters. Siblings who are confronted with negative, cold-hearted parent–child relationships, turn to each other for warmth and support, and thus establish a positive sibling relationship (Boer, Goedhart, & Treffers, 1992).

As for the association between marital relationship and sibling relationship, it should be mentioned that this association is, of course, somewhat different from the association between marital relationship and parent–child relationship, and from the association between parent–child relationship and sibling relationship. Different family members are involved in the marital relationship and the sibling relationship (i.e., parents in the former and siblings in the latter relationship). The two relationships are independent of each other. This may explain the differing outcomes of previous research regarding the association between marital relationship and sibling relationship. On the one hand, most studies have shown that when the quality of the marital relationship is high in terms of a high level of affection and a low level of conflict, the relationship between siblings tends to be affectionate (e.g., Caban, 2004; Dunn, Deater-Deckard, Pickering, Golding, & the ALSPAC Study Team, 1999; Yu & Gamble, 2008). The quality of the marital relationship might directly or indirectly influence a child’s relationship with his or her siblings. Exposure to marital conflict, for example, has a direct influence on children’s sibling relationships (Amato & Keith, 1991; Caban, 2004), while the quality of the marital relationship can indirectly influence the sibling relationship by disrupting parenting behaviors (Gerard, Krishnakumar, & Buehler, 2006). On the other hand, a recent study on intact families with two adolescent children did not support the association between the marital relationship and the sibling relationship (Deković & Buist, 2005).

Thus it seems that the marital relationship and the parent–child relationship are positively associated with each other. For the association between the parent–child and the sibling relationship, most studies report a positive association, although there is some evidence for a negative association. With regard to the association between the marital relationship and the sibling relationship, most studies support a positive association; however, there is also evidence that there is no association between these relationships.
2.1.2 Associations between family relationships and children’s psychosocial adjustment.

Associations between the quality of family relationships and children’s psychosocial adjustment have been studied extensively. A large number of studies have been carried out to assess the relation between the quality of the marital relationship and the psychosocial adjustment of children. For example, it was found that when parents are dissatisfied with their marital relationships and are having structural conflicts, their children show more problem behavior (Davies & Cummings, 1994; Fishman & Meyers, 2000; Jenkins, Simpson, Dunn, Rasbash, & O’Connor, 2005), such as conduct and personality problems (Hershorn & Rosenbaum, 1985), and internalizing and externalizing problem behavior (Katz & Gottman, 1993). On the other hand, when parents are satisfied with their partner relationships, their children do well and show high levels of psychosocial adjustment (e.g., Ferguson & Allen, 1978; Pawlak & Altman Klein, 1997). However, there are some differences between boys and girls. For example, Reid and Crisafulli (1990) found that the relation between parental conflict and children’s problem behavior is stronger for boys than for girls. In contrast, van der Valk, de Goede, Spruijt, and Meeus (2007) reported an association between marital distress, as reported by parents, and the emotional adjustment of adolescent girls but not that of adolescent boys. It appears that boys tend to react to parental conflict with more externalizing problem behavior, while girls tend to internalize problem behavior.

The association between parent–child relationship and child adjustment has drawn much attention. When the parent–child relationship quality is characterized by much affection and fewer conflicts, children show high levels of self-esteem (Amato, 1986; Wilkinson, 2004), prosocial behavior (Sturgess, Dunn, & Davies, 2001; Schneider, Atkinson, & Tardif, 2001), and low levels of psychological distress (Fishman & Meyers, 2000). When the quality of the parent–child relationship is characterized by less warmth and much conflict, children show more externalizing problem behavior (Sturgess, Dunn, & Davies, 2001) and are less satisfied with their lives when they become adults (Nickerson & Nagle, 2004).

In contrast, fewer studies have assessed the association between the quality of the sibling relationship and the children’s psychosocial adjustment (for reviews, see Brody, 1998; Parke, 2004). It has been shown that a warm relationship and low levels of conflict between siblings predict high levels of self-esteem and low levels of feeling lonely (Sherman, Landsford, & Volling, 2006). Several studies have reported a mediating effect of the quality of the sibling relationship on several family threats to younger sibling outcomes (e.g., mothers’ single parenting, and marital discord; East & Khoo, 2005; Jenkins & Smith, 1990). Sibling affection also moderates the relationship between stressful life events and internalizing problem behavior, independent of the quality of the parent–child relationship (Gass, Jenkins, & Dunn, 2007). Positivity within the sibling relationship is more strongly linked with child adjustment than sibling conflict (Pike, Coldwell, & Dunn, 2005), while a poor sibling relationship can contribute to the development of antisocial behavior and poor peer relationships (Snyder, Bank, & Burraaston, 2005).
2.1.3 Research aims

Although much attention has been paid to family relationships and children’s psychosocial adjustment, most studies focused on only one or two relationships within the family. It is well known that family relationships mutually influence each other (e.g., Bronfenbrenner, 1979). Besides, the quality of family relationship also affects the functioning of children, and vice versa (e.g., Golombok, 2000). Therefore, in the present study three different family subsystems were associated with each other and with children’s psychosocial adjustment. Further, the study employed both mothers’ reports and children’s reports: Mothers filled in a questionnaire about the quality of their marital relationships, while children were interviewed about the quality of their relationships with their fathers, mothers, and younger siblings, and about their psychosocial well-being. Children’s self-reports were used rather than parental reports, on which this type of research usually relies. Several studies have investigated the concurrence of parents and children on reporting children’s outcomes, and most of these studies show that children are reliable reporters (e.g., Herjanic, Herjanic, Brown, & Wheatt, 1975; Herjanic & Reich, 1997). Furthermore, a recent study found that children’s reports of indirect parental behavior are more consistently associated with children’s adjustment than parent reports (Haines, Neumark-Sztainer, Hannan, & Robinson-O’Brien, 2008).

Last, most of the previously mentioned studies focused on negative aspects of the relationship within the marital subsystem, while this study focused on a more positive aspect of this subsystem (i.e., the mother’s satisfaction with her partner and with her partner as a co-parent) in order to see whether we would still find positive associations with other family relationships within a sample of intact families with two children in middle childhood (8–12 years old).

The first aim was to assess whether the three family relationships (marital relationship, parent–child relationships, and child–sibling relationship) are associated with each other. Based on previous studies, we expected to find that all family relationships are positively correlated with each other. The second aim was to examine the extent to which all of the above-mentioned family relationships predict children’s psychosocial adjustment. In the present study, we focused on three aspects of children’s psychosocial adjustment – namely children’s problem behavior, general self-esteem, and social competence – because these aspects are important predictors of adult psychopathology and later life satisfaction (e.g., Heinonen, Räikkönen, & Keltikangas-Järvinen, 2005; McGue & Iacono, 2005; Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007). We expected to find that all family relationships are associated with these psychosocial adjustment variables.
Chapter 2

2.2 Method

2.2.1 Recruitment and response rate

We established three criteria for including a child in the study: He/she must have been raised in an intact family, be between 8 and 12 years old, and have a younger sibling who was at least 4 years old (so that the age gap between the target child and the younger sibling would not be too large). The participating families were recruited by three methods. First, a random sample consisting of 300 families that had a child who met our criteria was drawn from the population register of two cities in the Netherlands. These families received an information letter about the study and an invitation to participate. Thirty-nine mothers returned the enclosed postcards indicating their willingness to participate (response rate: 13%). Second, families were contacted through six elementary schools. The parents of 579 children aged between 8 and 12 received an invitation letter; of these families, 24 had a child who matched our criteria and were willing to participate. Third, families were contacted by the snowball method: Research assistants approached families in their personal networks that had a child who met our criteria. These families also received an information letter. Twenty-five families were recruited in this way. Thus, a total of 88 families participated in the study. No significant differences were found on social demographic variables between the participating families and the three recruitment methods.

2.2.2 Procedure

The families that had agreed to participate were contacted by phone to make an appointment for a home visit. The child questionnaire was administered during a one-hour interview with each target child in his or her home. During these sessions, the first author or one of her collaborators read the questionnaire items to the child and recorded the child’s answers. The mothers were asked to complete a questionnaire and return it to us in the stamped addressed envelope that we had provided.

2.2.3 Measures

Data were collected by means of maternal reports (family demographic characteristics, marital relationship) and child questionnaires (mother–child relationship, father–child relationship, sibling relationship, psychosocial adjustment).

*Family demographic characteristics.* Each mother was asked her age, her children’s ages, the number of children in the family, her educational level, her employment status, the number of hours she worked each week, and the family income.

*Quality of the marital relationship.* To measure each mother’s overall satisfaction with her partner relationship, we used the Marital Satisfaction Scale (MSS; Gerris et al., 1993) and the Relationship with Spouse subscale of the Parental Stress Index (PSI; Abidin, 1983; Groenendaal, Deković, & Gerrits, 1996). The MSS is an instrument to measure a mother’s satisfaction with her partner relationship. The scale consists of 7 items (e.g., “If I had to make a choice again, I would...”)
choose the same partner”). Respondents were asked to indicate their agreement with each item on a 6-point scale (1 = completely disagree; 6 = completely agree). The PSI Relationship with spouse subscale measures a mother’s satisfaction with her partner as a co-parent. This subscale comprises 7 items (e.g., “Since we’ve had children, my partner has been less supportive than I expected”). Respondents were asked to indicate their agreement with each item on a 6-point scale (1 = fully agree; 6 = fully disagree). Because both scales are highly correlated with each other ($r = .80$, $p = .001$), they were combined into one scale to improve the reliability (Cronbach’s $\alpha = .86$).

Quality of relationships between children and parents. The child version of the Parent–Child Interaction Questionnaire (PACHIQ-Ch; Lange, 2001) was used to measure the quality of each child’s relationship with the mother and with the father. The items in the questionnaire concern interpersonal behavior and interpersonal feelings toward the mother and the father separately. Children were asked to indicate how often they display a certain behavior or experience a certain feeling (1 = never; 5 = always). The PACHIQ-Ch consists of two scales: the acceptance scale (8 items, e.g., “When I do something for my mother/father, I see that she/he appreciates it;” Cronbach’s alpha: mothers = .76, fathers = .81), and the conflict scale (17 items, e.g., “When my mother/father and I disagree, we are able to talk about it;” Cronbach’s alpha: mothers = .89, fathers = .86).

Quality of the sibling relationship. A subscale of the Sibling Relationship Inventory (SRI; Stocker & McHale, 1992) and a subscale of the Leiden Sibling Relationship Questionnaire (LRSQ; Boer, 1990) were used to measure affection and quarreling, respectively, between the target child and his or her younger sibling. The affection subscale consists of 8 items of the SRI (e.g., “Some children share secrets with their brothers and sisters, and other children don’t. How often do you share secrets with [target sibling]?” Cronbach’s alpha = .69). Each item is scored on a 3-point scale (1 = never, 2 = sometimes, 3 = always). The quarreling subscale consists of 6 items (e.g., “My brother/sister is often angry with me;” Cronbach’s alpha = .61). Items are scored on a 4-point scale (1 = never true; 4 = always true).

Psychosocial adjustment of the child. Data on the psychosocial adjustment of each child were collected by means of child reports that included several aspects of children’s psychosocial adjustment.

Problem behavior was measured with the Total Difficulties Scale of the Strength and Difficulties Questionnaire Self-Report Version (SDQ; Goodman, 1997). Although this instrument is intended for children aged 11 and above, it has also been used in a non-clinical sample of children as young as 8 years old (Muris, Meesters, Eijkelenboom, & Vincken, 2004). This scale consists of 20 items or statements, for example “I am restless; I cannot stay still for long” or “I get very angry and often lose my temper”. Each statement has a response category ranging from 0 (not true) to 2 (certainly true). The sum of the scores of all items produces a total score that reflects the overall measure of problem behavior. Cronbach’s alpha was .60.
Chapter 2

General self-esteem and social competence were measured by two subscales of the adapted Dutch version of the Perceived Competence Scale for Children (PCSC Dutch version; van den Bergh & van Ranst, 1998). In the original PCSC, as developed by Harter (1985), the items are formulated as bipolar statements. The child first has to decide the kind of child he or she is and then report whether the description is “sort of true” or “really true” for him or her. Van den Bergh and colleagues showed that the response format used in the original PCSC was too complex for younger children (van den Bergh & de Rycke, 2003; van den Bergh & van Ranst, 1998). In the Dutch version of the PCSC, the response format is simpler: Children are asked to rate on a 4-point scale whether the labels or statements are true for them (1 = not true at all; 4 = very true). Each subscale consists of 7 statements, for example “I feel pretty sure of myself” (general self-esteem) and “I have a lot of friends” (social competence). Cronbach’s alphas were good (general self-esteem: .75; social competence: .78).

2.2.4 Participating families

Between them, the 88 families that participated in the study had 37 boys (42%) and 51 girls (58%); the children were interviewed and their mothers completed the questionnaire. No significant differences were found between boys and girls on any of the demographic characteristics of the sample. The mean age of the target children was 10.15 years (SD = 1.33), while that of their younger siblings was 7.17 years (SD = 1.50). The gender composition of the sibling pairs was as follows: 24 male/male, 13 male/female, 33 female/female, and 18 female/male. The mothers who participated in the study had a mean age of 41.05 years (SD = 4.24). Most mothers had received intermediate vocational education or higher, which is in line with figures from Statistics Netherlands regarding the mean educational level of women between the ages of 35 and 44 in the Netherlands (Latten & van Dijk, 2007). Around three-quarters of the mothers had a job, which corresponds to the Dutch average (de Jong & Steenhof, 2000). Most of the employed mothers were working on a part-time basis (M = 22.98 hours/week, SD = 7.80). Around three-quarters of the families had annual incomes that were near or above average (€35,000).

2.3 Results

2.3.1 Preliminary analysis

Descriptive statistics of the major study variables for the total group, and separately for the boys and the girls, are presented in Table 2.1. An independent samples t-test with gender (1 = boys, 2 = girls) as grouping variable revealed no significant differences between boys and girls on family relationship variables or psychosocial adjustment variables. Therefore, boys and girls were combined into one sample in the subsequent analyses.
Table 2.1 Means (SD) of all studied family relationship variables and psychosocial adjustment variables.

<table>
<thead>
<tr>
<th></th>
<th>Boys (n=37)</th>
<th>Girls (n=51)</th>
<th>t-scores (boys vs. girls)</th>
<th>Total (N=88)</th>
<th>Range</th>
<th>n of items</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital satisfaction</td>
<td>4.73 (1.08)</td>
<td>4.96 (1.17)</td>
<td>-1.03</td>
<td>4.86 (1.13)</td>
<td>1 – 6</td>
<td>14</td>
<td>.86</td>
</tr>
<tr>
<td>Parent-child relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother-child acceptance</td>
<td>4.09 (0.63)</td>
<td>4.28 (0.48)</td>
<td>-1.57</td>
<td>4.20 (0.55)</td>
<td>1 – 5</td>
<td>8</td>
<td>.76</td>
</tr>
<tr>
<td>Mother-child conflict</td>
<td>1.95 (0.58)</td>
<td>1.83 (0.51)</td>
<td>1.03</td>
<td>1.88 (0.55)</td>
<td>1 – 5</td>
<td>17</td>
<td>.89</td>
</tr>
<tr>
<td>Father-child acceptance</td>
<td>4.08 (0.63)</td>
<td>4.28 (0.57)</td>
<td>-1.56</td>
<td>4.19 (0.60)</td>
<td>1 – 5</td>
<td>8</td>
<td>.81</td>
</tr>
<tr>
<td>Father-child conflict</td>
<td>1.82 (0.48)</td>
<td>1.80 (0.50)</td>
<td>0.20</td>
<td>1.81 (0.49)</td>
<td>1 – 5</td>
<td>17</td>
<td>.86</td>
</tr>
<tr>
<td>Sibling relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling affection</td>
<td>2.23 (0.38)</td>
<td>2.32 (0.30)</td>
<td>-1.21</td>
<td>2.28 (0.34)</td>
<td>1 – 3</td>
<td>8</td>
<td>.69</td>
</tr>
<tr>
<td>Sibling quarreling</td>
<td>1.81 (0.42)</td>
<td>1.78 (0.37)</td>
<td>-0.40</td>
<td>1.79 (0.39)</td>
<td>1 – 4</td>
<td>6</td>
<td>.61</td>
</tr>
<tr>
<td><strong>Psychosocial adjustment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total problem behavior</td>
<td>0.91 (0.22)</td>
<td>0.92 (0.23)</td>
<td>-0.22</td>
<td>0.92 (0.23)</td>
<td>0 – 2</td>
<td>20</td>
<td>.60</td>
</tr>
<tr>
<td>General self-esteem</td>
<td>3.02 (0.46)</td>
<td>2.98 (0.48)</td>
<td>0.34</td>
<td>3.00 (0.47)</td>
<td>1 – 4</td>
<td>7</td>
<td>.75</td>
</tr>
<tr>
<td>Social competence</td>
<td>2.78 (0.59)</td>
<td>2.70 (0.50)</td>
<td>0.70</td>
<td>2.74 (0.54)</td>
<td>1 – 4</td>
<td>7</td>
<td>.78</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01

2.3.2 Bivariate Analyses

Marital relationship and parent–child relationships. Correlations between the marital relationship and the parent–child relationships are presented in Table 2.2. Mother’s marital satisfaction was significantly correlated with both aspects of the father–child relationship (acceptance and conflict). These associations indicate that children whose mothers report lower levels of partner relationship satisfaction, experience lower levels of acceptance and higher levels of conflict with their fathers.

Parent–child relationships and sibling relationship. Both the mother–child relationship and the father–child relationship were found to be strongly associated with the sibling relationship (see Table 2.2). All four parent–child relationships variables (mother–child acceptance and conflict, and father–child acceptance and conflict) were found to be significantly correlated with both sibling relationship variables (affection and quarreling). These associations indicate that children who report higher levels of warmth toward and lower levels of conflict with their parents, also report higher levels of sibling affection and lower levels of sibling quarreling.

Marital relationship and sibling relationship. No significant associations were found between mother’s marital satisfaction and the sibling relationship variables (see Table 2.2).
Family relationships and child adjustment. All family relationships were found to be associated with children's well-being. The quality of the marital relationship is correlated with children's general self-esteem (see Table 2.2). Mothers who report higher levels of marital satisfaction, have children who report higher levels of general self-esteem. There is also an association between the quality of the parent/child relationships and the children's psychosocial adjustment. Children who report lower levels of parent–child conflict and higher levels of parent–child acceptance, also report lower levels of total problem behavior and higher levels of general self-esteem. Last, the quality of the sibling relationship is also associated with child adjustment: Sibling affection is associated with general self-esteem, while sibling quarreling is associated with total problem behavior. Children who report high levels of sibling affection, also report high levels of general self-esteem. On the other hand, children who report high levels of sibling quarreling, also report high levels of total problem behavior.

Table 2.2 Pearson correlation coefficients between family relationship variables and children's psychosocial adjustment variables (N= 88).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Marital satisfaction</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parent-child relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mother-child acceptance</td>
<td>.19</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mother-child conflict</td>
<td>-.21</td>
<td>-.77**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Father-child acceptance</td>
<td>.46**</td>
<td>.72**</td>
<td>-.64**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Father-child conflict</td>
<td>-.36*</td>
<td>-.63**</td>
<td>.77**</td>
<td>-.72**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sibling relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sibling affection</td>
<td>.14</td>
<td>.38**</td>
<td>-.33**</td>
<td>.38**</td>
<td>-.31**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Sibling quarreling</td>
<td>-.20</td>
<td>-.41**</td>
<td>.41**</td>
<td>-.42**</td>
<td>.30**</td>
<td>-.25*</td>
<td>-</td>
</tr>
<tr>
<td><strong>Psychosocial adjustment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total problem behavior</td>
<td>-.18</td>
<td>-.37**</td>
<td>.40**</td>
<td>-.37**</td>
<td>.46**</td>
<td>-.20</td>
<td>.29**</td>
</tr>
<tr>
<td>General self-esteem</td>
<td>.22*</td>
<td>.26*</td>
<td>-.21*</td>
<td>.30**</td>
<td>-.25*</td>
<td>.34**</td>
<td>-.15</td>
</tr>
<tr>
<td>Social competence</td>
<td>-.04</td>
<td>.06</td>
<td>.03</td>
<td>.16</td>
<td>-.13</td>
<td>.17</td>
<td>-.03</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01

2.3.3 Multiple Regression Analyses

A summary of the multiple regression analysis for family relationships variables that predict children’s psychosocial adjustment is given in Table 2.3. All variables regarding the quality of mothers’ relationships with their partners and children’s relationships with both their parents (acceptance, conflict) and their siblings (affection, quarreling) were included in the model,
because correlation analysis (see Table 2.2) had revealed that these variables are strongly intercorrelated. Analyses were carried out separately for children’s problem behavior, general self-esteem, and social competence.

Table 2.3 Summary of multiple regression analysis for family relationship variables predicting children’s problem behavior, general self-esteem, and social competence.

<table>
<thead>
<tr>
<th></th>
<th>Problem behavior</th>
<th>General self-esteem</th>
<th>Social competence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Marital relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital satisfaction</td>
<td>-.01</td>
<td>.02</td>
<td>-.04</td>
</tr>
<tr>
<td>Parent-child relationships</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother-child acceptance</td>
<td>.00</td>
<td>.07</td>
<td>.00</td>
</tr>
<tr>
<td>Mother-child conflict</td>
<td>.05</td>
<td>.08</td>
<td>.12</td>
</tr>
<tr>
<td>Father-child acceptance</td>
<td>.01</td>
<td>.07</td>
<td>.02</td>
</tr>
<tr>
<td>Father-child conflict</td>
<td>.17</td>
<td>.08</td>
<td>.37*</td>
</tr>
<tr>
<td>Sibling relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling affection</td>
<td>-.00</td>
<td>.07</td>
<td>-.00</td>
</tr>
<tr>
<td>Sibling quarreling</td>
<td>.06</td>
<td>.07</td>
<td>.10</td>
</tr>
<tr>
<td>R²</td>
<td>.26</td>
<td></td>
<td>.21</td>
</tr>
<tr>
<td>F</td>
<td>3.75**</td>
<td>2.86*</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 2.3, multiple regressions revealed that particularly the relationship between child and father and between child and sibling were significant predictors of children’s psychosocial adjustment. Children who report higher levels of conflict with their fathers, also report higher levels of problem behavior. Father–child conflict ($\beta = .37$, $p < .05$) accounted for 26% of the variance in problem behavior. Furthermore, children who report higher levels of acceptance and affection toward their fathers and siblings, report higher levels of general self-esteem. It was found that the child’s level of acceptance with his/her father ($\beta = .40$, $p < .05$) and affection toward his/her sibling ($\beta = .23$, $p < .05$) accounted for 21% of the variance in general self-esteem. Last, none of the variables entered in the model significantly predicted children’s scores for social competence (see Table 2.3).

2.4 Discussion

The two aims of the present study were to assess whether the three family relationships are associated with each other, and to examine the extent to which these relationships predict children’s psychosocial adjustment. Our results support the spillover perspective for the
association between the marital relationship and the parent–child relationship, and for the association between the parent–child relationship and the sibling relationship. Furthermore, only the quality of the father–child relationship and that of the sibling relationship predict children’s psychosocial adjustment.

Before discussing the results in detail, it should be mentioned that, in contrast to several other studies, preliminary analyses did not support differences between boys and girls on any of the psychosocial outcome variables (total problem behavior, general self-esteem, and social competences). It might be possible that we did not find any differences between boys and girls due to the low statistical power of the t-tests ($1-\beta= .63$). However, it is also possible that boys and girls in the Netherlands do not significantly differ from each other on these outcome variables. Previous studies in the Netherlands also found no support for differences between the two sexes on children’s adjustment variables (e.g., Bos & Sandfort, 2009). Because boys and girls did not significantly differ on any of the outcome variables, we combined them into one sample for the subsequent analyses.

Regarding the first aim of the study, our findings both partly support previous research and reveal some interesting and unexpected results. First, our results support the spillover perspective regarding the association between the marital and the parent–child relationship. A warm marital relationship is associated with a parent–child relationship that is characterized by high levels of acceptance and low levels of conflict. However, it is notable that mothers' evaluations of their marital relationships are associated only with variables concerning the father–child relationship (acceptance and conflict), and not with the mother–child relationship. Previous studies also showed more clear associations between marital quality and the father–child relationship, than between marital quality and the mother–child relationship (e.g., Belsky et al., 1991, Kerig, Cowan, & Cowan, 1993). It appears that a mother’s relationship with her partner is more strongly correlated with the father–child relationship than with the mother–child relationship. This finding can be explained by the fact that mothers may be more skilled at separating relationships from each other (in this case, separating the marital relationship from the mother–child relationship) (Belsky et al., 1991).

Second, our results support the association between the parent–child relationship and the sibling relationship. All variables of the parent–child relationship (acceptance, conflict) were found to be significantly correlated with all variables of the sibling relationship (affection, quarreling). This result was also confirmed by several previous studies (e.g., Brody, Stoneman, & McCoy, 1994; Pike, Coldwell, & Dunn, 2005). Again, this finding can be explained from the spillover perspective: Children who maintain a warm relationship with their parents also have a warm relationship with their siblings, and vice versa.

Third, contrary to previous studies, our results do not support the association between marital relationship and sibling relationship. The reason we did not find support for this association might be that other persons are involved in these relationships. However, Yu and
Gamble (2008) concluded that there is a direct effect of the marital relationship quality on sibling relationship quality. On the other hand, Deković and Buist (2005) reported no significant association between marital relationship and sibling relationship within a sample of intact families with two adolescent children in the Netherlands. This lack of agreement might also be related to the conceptualization of marital relationship quality. Like Deković and Buist (2005), we used a more general conceptualization of marital quality: The mothers were asked how satisfied they were with their spouses as partners and as co-parents, while in other studies (e.g., Amato & Keith, 1991; Caban, 2004) the focus was more on negative aspects of the marital relationship, for example hostility and conflict between parents. It is possible that negative behavior within the marital relationship influences the relationship between siblings more than the mother’s general satisfaction with her partner and her partner’s co-parenting skills. This explanation is analogous to Roberts and Strayer’s (1987) threshold theory, namely that higher levels of warmth in the parent–child relationship do not result in increasing levels of psychosocial adjustment once a certain threshold has been reached.

We also examined the extent to which family relationships predict children’s psychosocial adjustment. Although our results support the assumption that family relationships predict children’s psychosocial adjustment, this applies only to children’s problem behavior and general self-esteem. Multiple regression analyses revealed that especially children’s relationships with their fathers and their siblings have a significant impact on their problem behavior and general self-esteem. None of the family relationship variables contributed to predicting children’s social competence; however, this might be due to the low statistical power of the regression-analysis for social competence.

The quality of the father–child relationship is a significant predictor of a child’s psychosocial adjustment. Father–child conflict significantly predicts a child’s problem behavior, and father–child acceptance is a significant predictor of a child’s self-esteem. According to Baily (1994), as children grow older, fathers’ participation increases as does their influence on their children. Some studies on the relationship between fathers and their adolescent offspring also showed that father involvement has a stronger effect on the adolescent psychosocial adjustment than mother involvement (Allen, Hauser, Bell & O’Conner, 1994; Flouri & Buchanan, 2003). An alternative explanation for the finding that only the father–child relationship is associated with children’s adjustment, might be related to the fact that mothers spend more time with their children than fathers do, and therefore have more conflicts with their children (Bronstein, 1984). Although in the Netherlands opinions about the roles of fathers and mothers have changed considerably over the last few decades, mothers are still the primary caretakers (Evenblij, 2009). Because contact and conflict between father and child is less common, it might be that a conflict between father and child is more serious, and that this affects a child’s adjustment more than a mother–child conflict.

Regarding the sibling relationship, only affection between siblings was found to be related to children’s general self-esteem. This result might be influenced by the fact that the children who
participated in the study were the older siblings, who might feel more responsible for the welfare of their younger siblings. However, in other studies positivity within the sibling relationship was more strongly linked with child adjustment than negativity (e.g., Pike, Coldwell & Dunn, 2005; Yeh & Lempers, 2004).

Surprisingly, a mother’s marital satisfaction was not a significant predictor of her children’s psychosocial adjustment. Again, this can be explained by the threshold theory (Roberts & Strayer, 1987). The mothers in our study reported to be very satisfied with their partner relationships and with their partners as co-parents. It is possible that a higher quality of marital relationship does not result in increasing levels of psychosocial adjustment once a certain threshold has been reached.

Our study had a number of limitations. First, its cross-sectional design gives no indication of the sequence of events, for example whether a mother’s partner satisfaction decreases before, after, or during conflicts within the father–child relationship. To infer causality, a longitudinal design is recommended for future research. Second, the data on family relationships were collected by means of maternal reports and interviews with children. The mothers reported on their marital relationships and the children were asked about their relationships with their parents and their siblings. It might be more reliable to collect information from two perspectives, for example by letting the mothers and children report on all three of the family relationships examined, or by including fathers and siblings in the study and letting these family members report on the relationships in which they are involved. Last, more girls than boys participated in our study. Further research should include more boys in the sample, in order to investigate differences between boys and girls on family relationships and children’s adjustment.

Although the association between family relationships and children’s psychosocial adjustment has been widely studied, the present study was one of the first in which all three family relationships were explored and associated with each other and with children’s psychosocial adjustment. This is one of the strengths of this study, because several theories about family functioning stress that all family relationships are mutually influenced by each other, and that a single relationship within a family cannot be seen as an isolated process. Furthermore, this study relied on maternal and child reports. Making use of relatively young children’s personal views on the quality of their family relationships and their own perceptions of their psychosocial adjustment, adds something novel to the literature on family relationships.

In sum, our study confirmed the spillover perspective regarding the association between marital relationship and parent–child relationship, and the association between parent–child relationship and sibling relationship. Further, the quality of the parent–child relationship and that of the sibling relationship were found to be associated with the psychosocial adjustment of children in middle childhood. However, the association between marital relationship and sibling relationship, and that between marital relationship and children’s psychosocial adjustment, were not confirmed.
References


