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Exploration of family conflict dynamics

A quantitative study using a multi-informant approach to assessing perceptions of conflict in families using a Norwegian sample

Master's thesis in Family Therapy

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Abstract

Previous studies have investigated interparental conflict (IPC) and its influence on family relationships and child development from parents' point of view. Even though systemic theory emphasises the interrelatedness of family members and family processes, very little research in this field has been based on both children's and parents' reports, and no study before has applied the Social Relations Model (SRM), a well-suited method for investigating complex social phenomena, to family conflict. Aiming for a more holistic understanding of family conflict dynamics, the present study used multi-informant measures and applied SRM analysis. The two research questions asked concern individual, relational and family level differences in the perceptions of conflict between two and two family members (RQ1) and the associations between parent and child perceptions of IPC and parental conflict resolution, respectively (RQ2).

Data were drawn from Wave 1 of the FamilieForSK study, a longitudinal survey study from the Norwegian Institute of Public Health (Folkehelseinstituttet). The sample in the present study comprised 599 families consisting of mothers, fathers and children aged 6-16.

The results were mainly consistent with previous research on IPC and with patterns from previous SRM-studies from different research fields. The results highlighted, amongst other things, the importance of relationship-specific characteristics for parent perception of IPC, as well as the importance of child characteristics for both parent and child perceptions of parent-child conflict.

This study contributes to a more nuanced understanding of the agreement and disagreement between parents and children in terms of their perception of both IPC and parental conflict resolution. The implications of this study for practitioners underscore the importance of taking into account child-characteristics when working with parent-child conflict, focussing on the relationship-level when working with IPC plus generally paying attention to child appraisals of IPC or parental conflict resolution as these might differ from the parents' appraisals.

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Sammendrag

Tidligere studier har undersøkt foreldrekonflikt og dens innflytelse på familierelasjoner og barns utvikling fra et foreldreperspektiv. Selv om systemisk teori vektlegger en gjensidig påvirkning mellom familiemedlemmer og familieprosesser, er det svært lite forskning på familiekonflikter som baserer seg på både barne- og foreldreperspektiv. I tillegg har ingen studier på feltet anvendt Social Relations Model (SRM), en velegnet metode for å undersøke komplekse sosiale fenomener. Med sikte på å få en mer helhetlig forståelse av dynamikken i familiekonflikter bruker denne studien multiinformantmål og SRM-analyse. Studien stiller to forskningsspørsmål som undersøker hvordan familiemedlemmenes oppfatning av konflikt med hverandre varierer på individ-, relasjons- og familienivå, og hvordan foreldres og barns opplevelser av foreldrekonflikt og foreldres konfliktløsning henger sammen.

Dataene er hentet fra T1-datainnsamlingen i FamilieForSK-studien, en longitudinell spørreundersøkelse fra Folkehelseinstituttet. Utvalget i denne studien besto av 599 familier med mødre, fedre og barn i alderen 6-16 år.

Resultatene var hovedsakelig sammenfallende med tidligere forskning på foreldrekonflikt, og viste like mønstre som tidligere SRM-studier fra andre felt. Hovedresultatene understreker betydningen av relasjonelle egenskaper ved foreldreforholdet for foreldres opplevelse av foreldrekonflikt, samt betydningen av individuelle egenskaper ved barnet for både foreldres og barns opplevelser av foreldre-barn-konflikt.

Denne studien bidrar til en mer nyansert forståelse av likheter og ulikheter mellom foreldre og barn når det gjelder deres opplevelse av både foreldrekonflikt og foreldres konfliktløsning. Studiens understreker viktigheten av å ta hensyn til barnets individuelle egenskaper i arbeid med foreldre-barn-konflikt, å ha fokus på foreldrerelasjonen i arbeid med foreldrekonflikt, og være oppmerksom på at barns opplevelse av foreldres konflikt og konfliktløsning kan avvike fra foreldres opplevelse.

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1. Introduction

As part of my master's degree in family therapy I have been working with families during my internships at the child and adolescent psychiatry (Barne- og ungdomspsykiatrisk poliklinikk) and the family counselling office (Familievernkontor). I noticed that despite the different reasons for families to seek help or advice, there was a common challenge that many families encountered, namely that they had to deal with conflict. These could be all kind of different conflicts, like emotional conflicts between (ex-)partners, parental conflicts or disagreements about parenting, or conflicts between parent and child, to name but a few conflict scenarios. This sparked my interest in conflict in families and in parental conflict resolution (or lack thereof) as typical parts of family dynamics that I am most likely going to encounter regularly as a family therapist. The present study explores family conflict dynamics such as interparental conflict (IPC) and parent-child conflict as well as parental conflict resolution, with a focus on similarities and differences in the family members' perceptions. This may lead to valuable implications for therapeutic approaches when dealing with conflict in families.

To gain a deeper understanding of the theoretical and empirical foundation of conflict in families, this chapter will first place conflict in families in the context of systemic theory, before presenting a brief overview of previous research on parent-child conflict, IPC and parental conflict resolution. Then, the Social Relations Model is introduced as a suitable analytical framework and tool for exploring the complexity of family conflict dynamics and finally, the research questions of the present study are presented.

1.1 Conflict in families: A systemic perspective

General System Theory (von Bertalanffy, 1968) has been an important influence for the development of family therapy (Torsteinsson, 2019, p. 26) and states that living organisms are in constant, mutual interaction with their surroundings (Johnsen & Torsteinsson, 2012, p. 28). It implies rules for many different systems, such as biological, mechanical or social systems (Frøyland, 2017, p. 21) including small social systems like families (von Bertalanffy, 1968, p. 195). Cox and Paley (2003) neatly and succinctly describe the application of General System Theory to family systems as follows:

> According to such theory, family systems are characterized by (a) wholeness and order
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> (i.e., the whole is greater than the sum of its parts and has properties that cannot be
>
> understood simply from the combined characteristics of each part), (b) hierarchical

structure (i.e., a family is composed of subsystems that are systems in and of themselves), and (c) adaptive self-organization (i.e., a family, as an open, living system, can adapt to change or challenges). (p. 193)

The systemic perspective on families takes into account that there are "family subsystems" which are constantly influenced by, and mutually influencing, each other (Cox et al., 2001, p. 249; Grych et al., 2004, p. 650). Family subsystems are dyads within the family formed by generation, sex, interest or function (Minuchin, 1974, p. 52). Today, the concept of family subsystems is most commonly used in sense of generations (parental subsystem vs. sibling-subsystem). This systemic perspective manifests itself in family therapy frameworks such as structural family therapy, where emphasis is placed on working with boundaries between the parental subsystem and the sibling subsystem (Minuchin, 1974, pp. 143-147; Simon, 2008, p. 324). And in strategic family therapy, where the emphasis of explaining behaviour, especially problem behaviour, is focused on what happens *between* people as opposed to what happens *within* people (Shoham et al., 2008, p. 300).

This systemic view of families, behaviour and problems has been used for theories about and research on conflict within families and the role of IPC in family dynamics and child development. The application of system theories has thereby led to new questions, not only about how IPC affects the parent-child relationship, but also about how the parent-child relationship reciprocally influences IPC (Cox et al., 2001, p. 249). According to Cox et al. (2001, pp. 250-253) there are several hypotheses about the mutual influence between IPC and parent-child relationship: The spillover hypothesis and the emotional security theory, as well as hypotheses on parental withdrawal, scapegoating, detouring, triangulation and boundary dissolution. The present study will focus on the first two since they are the ones considered most relevant for this study.

The spillover hypothesis (Engfer, 1988; Erel & Burman, 1995) concerns the idea that expressed feelings can "spill over" from one relationship system to another. In the case of family conflict, the spillover hypothesis states that negative emotions from unresolved IPC could spill over from the parents' relationship to the parent-child relationship, which would be explained by mechanisms such as the parents being less emotional available for their child or less sensitive for the child's needs because they are occupied with their own problems (Cox et al., 2001, pp. 250-251). The spillover hypothesis suggests further that negative emotions can also spill over from the parent-child relationship to the parents' relationship, caused by "difficult"

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children requiring extra attention or arising from general stress that can come with childrearing (Erel & Burman, 1995, p. 110). A third direction of spillover could be outer stressors like unemployment or a chronic disease that increase stress and conflict in all relationships within the family (Erel & Burman, 1995, p. 110).

The emotional security theory (EST; Cummings, 1998; Davies & Cummings, 1994) on the other hand highlights the importance of emotional security for the children's ability to effectively cope with stress and daily challenges (Davies & Cummings, 1994, p. 388). The EST presumes that parents and their relationship with each other are important sources for children's security, and therefore, IPC may threaten the children's security (Holt et al., 2020, pp. 188-189). There are three interrelated processes associated with children's emotional security, namely the children's emotional regulation, their attempts to regulate their exposure to IPC, and their internal representation of family relations (Davies & Cummings, 1994, pp. 390-391; 1998, p. 125). Each of these processes can be influenced or disturbed by IPC, leading to children coping less effectively with problems and becoming more dysregulated (Davies & Cummings, 1994, p. 389): When IPC affects the children's emotional regulation, they can experience increased emotional reactivity like fear, distress or vigilance (Davies & Cummings, 1998, p. 125). When IPC triggers children's behavioural response, they try to regulate their exposure to IPC to increase their emotional security by either avoiding the IPC, or by involving themselves actively in the IPC as an attempt to calm the conflict down (Davies & Cummings, 1998, p. 125). And when IPC occurs over time, it may alter the children's internal representations of family relations, making the children become more insecure about the stability of the parents' relationship and possibly worried about parents breaking up, or IPC either escalating or spilling over to the parent-child relationships (Davies & Cummings, 1994, p. 391; 1998, p. 125). As a result of the influence of IPC, a disturbance of these three processes can cause children to feel less safe in their families and induce changes in the parent-child relationship (Cox et al., 2001, p. 251). It has on the other side been argued that good parental conflict resolution can also influence these processes in a positive direction, as it subsequently alters the meaning of IPC for the family, thereby making the children more secure about the parents' relationship and therefore changes how children understand IPC and respond to it (Goeke-Morey et al., 2007, p. 751).

Cox et al. (2001) argue that the different applications of system theory to the topic of family conflict are beneficial, because they help creating a broader understanding of multiple and reciprocal pathways between IPC and difficulties in the parent-child relationship. They suggest

that "marital conflict, rather than producing one effect (e.g., less sensitive parenting), produces a network of effects on the family system that then feed back into the system" (2001, p. 258).

1.2 Previous research on conflict in families

A vast amount of research has focused on IPC, mainly on how IPC affects children, but also on its effects on the parent-child relationship and the parents' relationship as a couple. For example, couple therapists Gottman and Gottman who have been studying couples for over three decades, compared couples that stay together relatively happy over time with couples that either split up or stay together unhappy (2008, p. 139). Central findings from their research indicate that all couples may experience conflict, and that the couple's conflict management abilities, such as down-regulating conflict and up-regulating positive emotions during conflict, have an important impact on the couple's happiness (2008, pp. 140-142).

Numerous studies have investigated the consequences of IPC for children and findings indicate that IPC can affect children of all ages and can lead to child maladjustment (i.e., internalising and externalising behaviour) (Grych et al., 1992, p. 558; Zemp et al., 2016, pp. 99-100). A comprehensive meta-analysis about the association between IPC and children's maladjustment and responses to IPC has recently confirmed that IPC is an important risk factor for child functioning, and that IPC has a robust association with children's emotional, behavioural and physiological responses (van Eldik et al., 2020, pp. 584-585).

Research has shown that it is not only the presence of IPC that influences children, but more importantly the way parents handle and solve IPC that affects *how* IPC influences children (Zemp et al, 2016, p. 100). It has been shown that good parental resolution skills and constructive problem-solving acts as a buffer for children against the negative effects of IPC (Cummings et al., 1991; Cummings & Wilson, 1999). Child positivity increases and child anger, sadness and concern, as well as dysregulated child behaviour decrease, proportionately to the degree to which parents solve IPC (Goeke-Morey et al., 2007, p. 748). This implies that IPC does not need to be fully resolved for children to benefit from parental conflict resolution (Zemp et al., 2016, p. 100). It has additionally been shown that children do not need to witness parental conflict resolution directly in order to benefit from its positive effects. Parental conflict resolution "behind closed doors" (i.e., parents telling the children subsequently that they resolved the conflict, or children noticing a positive change of mood in their parents) results in equally positive effects for the children (Cummings et al., 1993, p. 981). Apart from minimizing the negative effect of IPC on children, parental conflict resolution is also beneficial for children

as it teaches children good ways of dealing with and resolving conflict (Goeke-Morey et al., 2007, p. 751).

It has been pointed out that there has been done little research on IPC regarding other family relations such as the parent-child relationship (Grych et al., 2004, p. 649). There are indications though about an association between children's perception of IPC and the quality of the father-child relationship (Lucas-Thompson & George, 2017a, pp. 936-937). Other research indicates that the connection between IPC and the parent-child relationship is mutual in the way that problems in the parent-child relationship can cause IPC, but problems in the parent-child relationship are also more likely to occur in families with more IPC (Cox & Paley, 2003, p. 193). The important role of this kind of mutual or bidirectional influence between parents and children have been confirmed in other fields, like for associations between parent and infant anxiety (Brooker et al, 2015, p. 8) or for mutual parent-child influences for youth anxiety treatment (Silverman et al., 2009, p. 483). A recent meta-analysis on the relationship between parent functioning and children's externalising behaviours also found evidence for mutual parent- and child-effects (Yan et al., 2021, p. 230).

It is important to note that most studies in the field of IPC are based on parent reports (Holt et al., 2020), although some (but not many) are based on both parent and child reports about: IPC (parent report) and emotional security (child report) (Davies et al., 2016); IPC, child adjustment (both parent report) and parental conflict resolution (parent and child report) (Goeke-Morey et al., 2007); and severity of IPC (parent report) and child reactions to IPC (child and parent report) (Holt et al., 2021). Only very few studies have compared parents' and children's perception of IPC or parental conflict resolution (Goeke-Morey et al., 2007; Lucas-Thompson & George, 2017a, 2017b). That is, in families where parents reported more frequent and poorly resolved IPC, the child(ren) in the family also reported higher levels of IPC (Lucas-Thompson & George, 2017a, pp. 935-936, 2017b, p. 2512), which suggests that parents' and children's perceptions of parental conflict resolution are related, even though they also differ to some degree (Goeke-Morey et al., 2007, p. 751).

Studying IPC (and parental conflict resolution) with a multi-informant approach is important, because it accounts for the complexity of family dynamics (Holt et al., 2021). Also, parents might be unaware of their children's reactions to IPC because children might hide their reactions to IPC from their parents or because parents might be too occupied by the conflict to notice the children's reactions (Holt et al., 2021). It can further be argued that also siblings' perceptions of IPC are a valuable source of information on family dynamics, as it has been

shown that siblings perceive IPC similarly but not in every aspect, which again gives indications about differences in conflict exposure (Lucas-Thompson & George, 2017a, p. 937). Consequently, parent's reports on IPC alone might not give a good or full picture of the family's situation and thus, multi-informant approaches with the simultaneous assessments of parent and child perceptions should be aspired.

1.3 Capturing complexity in family systems – the Social Relations Model with roles

Based on a systemic perspective, families should be understood as systems with multiple levels that are mutually influencing each other across time (Cox et al., 2001, p. 250). It is therefore important to consider the context of several levels instead of doing research on one level only (Cox & Paley, 2003, p. 195). This is particularly true for research topics like conflict that naturally involve more than one person, and consequently, such topics should be examined with statistical methods that focus on relationships between individuals, rather than on the individuals itself (Kenny et al., 2006, p. 3). The Social Relations Model (SRM; Kashy & Kenny, 1990; Kenny et al., 2006) is such a method that takes into account the dyadic or interpersonal character of such topics. While a more detailed description of how it works statistically and how it is applied in the present study can be found in the method section (see Chapter 2.5.1), its general framework is presented in this chapter.

Originally, SRM was developed *without roles* (Kenny & La Voie, 1984), to study groups with indistinguishable group members such as groups of friends or classmates (Kenny et al., 2006, p. 187). It was later developed to SRM *with roles*, to also be applicable to groups with distinguishable group members such as families with the "roles" of mother, father and child (Kenny et al., 2006, p. 223). As such, SRM investigates different family members' statements about each other. These "dyadic" statements could be about what (or how) each family member thinks about, feels or behaves towards each other family member (Kenny et al., 2006, pp. 225-226). In terms of SRM, each statement has an "actor" who makes the statement and a "partner" whom the statement is made about. Furthermore, SRM is based on the idea that each statement is influenced by four different effects, namely the actor-effect, the partner-effect, the relationship-effect and the family-effect, with the ratio of these effects depending on the size of their respective influences (Kenny et al., 2006, p. 226). Additionally, selected effects can be correlated (called reciprocities). With this concept, SRM makes it possible to simultaneously examine family dynamics on the individual, the relational (or dyadic) and the family (or group)

level (Eichelsheim, 2011, p. 10). On the individual level, SRM distinguishes between characteristics of the family member making statements (actor-effect) and characteristics of the family member that statements are made about (partner-effect), as well as the correlations between a family member's actor- and partner-effect (general reciprocity) (Kenny et al., 2006, pp. 227-228). On the dyadic level, SRM shows characteristics of specific relationships (relationship-effects), as well as correlations between specific relationship-effects (dyadic reciprocity) and on the family level, it shows characteristics of the specific family (family-effect) (Kenny et al., 2006, pp. 227-228).

A review made on SRM studies (Eichelsheim et al., 2009) gives indications for reoccurring patterns in the ratio of the different effects and reciprocities commonly found in SRM-studies. For SRM-studies on the three family members mother, father and child, actor-effects often account for large amounts of variance (average of 47%), especially for children's actor-effects (66-73%), while partner-effects only account for modest amounts of variance (average of 18%). Relationship-effects were found to account for relatively large amounts of variance (average 26%) with the highest amounts between parents (37-39%), while family-effects only account for small amounts of variance (average of 8%). The review did not find patterns for general reciprocities. However, half of the reviewed studies had a significant dyadic reciprocity for the parents' relationship (Eichelsheim et al., 2009, pp. 1061-1062).

SRM has previously been used to study various dyadic phenomena in families, such as emotional support (Tagliabue & Lanz, 2009), anger (Halberstadt et al., 2015), negativity (Eichelsheim et al., 2011) and closeness and negative disclosure (Schrodt & Afili, 2018). Even though SRM appears to be well-suited for investigating family conflict dynamics, it has, as far as I am aware, never before been used in the study of conflict between family members and thus, the present study is the first to do so.

1.4 Study aim and research questions

The aim of the present study is to explore family conflict dynamics – IPC and parent-child conflict – through SRM. And further, to explore parent and child perspectives on IPC and parental conflict resolution. Thereby, the present study contributes to a more holistic and nuanced understanding of the inner dynamics of IPC and parent-child conflict.

1.4.1 Research question 1 (RQ1): Similarities and differences on the individual, relational and family level of family conflict perception

As described in Chapter 1.3, the Social Relations Model (SRM) is a well-suited statistical approach for the analysis of the complexity of family dynamics, that has not yet been applied to the matter of conflict. The present study contributes to closing this gap by exploring different levels of family conflict perception of mothers, fathers and children with the help of SRM. The questions being asked are:

- **RQ1.1** How do family members differ in the way that their conflict perception is influenced on the individual (actor- and partner-variance), relational (relationship-variance) or family level (family-variance)?

- **RQ1.2** Are there any associations between one family member's general experience of conflict with the others, and the others' general experience of conflict with this family member (generalized reciprocity), or between the relationship-specific parts of conflict perception among any two family members (dyadic reciprocity)?

Based on the systematic review on SRM in family studies (Eichelsheim et al., 2009), the results from SRM analyses in the present study are anticipated to show that actor- and relationship-effects account for larger amounts of variance, while partner- and family-effects are expected to account for smaller amounts of variance. Regarding reciprocities, only dyadic reciprocity for the parent-relationship is expected to reach significance.

1.4.2 Research question 2 (RQ2): Associations between parent and child perceptions of IPC and parental conflict resolution

As described in Chapter 1.2, a broad variety of studies has been done on how IPC can affect children, and on children's perception of IPC and parental conflict resolution. But most studies on the field are based on parent's report (Holt et al., 2020) and only very few studies have investigated the association between parents' and children's perceptions. As the present study has the benefit of being based on the assessment of both parents and children and since both IPC and parental conflict resolution are important aspects of family conflict dynamics, the present study aims at taking a closer look at IPC and parental conflict resolution through the comparison of the parents' and the children's perception of them. Similarities and differences between the family subsystems can give important clues for a more holistic, systemic understanding of family conflict. The questions being asked are:

- **RQ2.1** What is the relationship between parents' and children's perceptions of IPC?
- **RQ2.2** What is the relationship between parents' and children's perceptions of parental conflict resolution?
- **RQ2.3** Is the relationship between the perception of IPC and parental conflict resolution the same for parents and children, respectively?

Based on previous studies, the results from analyses of RQ2 are anticipated to show that there is a positive relationship between parents' and children's perception of both IPC and parental conflict resolution (Lucas-Thompson & George, 2017a, 2017b), and that perceptions of better parental conflict resolution being related to perceptions of less IPC (Goeke-Morey et al., 2007).

2. Method

The present study is a quantitative study that uses multi-informant survey design with responses from both parents and children, which is ideally suited for investigating family dynamics. This chapter will first provide a detailed description of the study that the data is drawn from, before describing the sample and the study measures. Finally, the research ethics are discussed and the analytical approach is presented.

2.1 Data source and procedure

This study uses data from the ongoing Family Dynamics Study (FamilieForSK), a longitudinal survey study from the Norwegian Institute of Public Health (Folkehelseinstituttet). The aim of the FamilieForSK study is to gain more knowledge about family dynamics and conflict in Norwegian families, with a special focus on children's reactions to interparental conflict and the effects of interparental conflict on children's adjustment and well-being (Folkehelseinstituttet, 2021). The FamilieForSK study is funded by the Research Council of Norway (Forskningsrådet) and the Norwegian Directorate for Children, Youth and Family Affairs (Bufdir).

From December 2017 to midway through 2019, families with children aged 0-15 were recruited through 37 family counselling offices[1] from all over Norway (except the north) when they attended family therapy, counselling or mandatory divorce/relationship dissolution mediation. Families of different constellations were invited to participate (i.e., families where parents lived together, families where parents were in the separation process or already separated, families with same-sex parents, single parents and foster parents). Parents were invited to participate with up to five children, not including children with previous or new partners). Parents completed online surveys comprising questions about the relationships with the child(ren) and with the other parent, as well as general question about the family and parent demographics, and age-adjusted questions about the three youngest participating children. Children aged 7-15 completed a different survey, including amongst other things questions about the children's relationship with their parents and their perception of their parents' conflicts, and their well-being and mental health. Children aged 12-15 completed the survey online, while children aged 7-11 were given the same questions by trained interviewers during a structured interview. For

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[1] In Norway, the Norwegian Directorate for Children, Youth and Family Affairs (Bufdir) runs family counselling offices (Familievernkontor), that provide free-of-charge and low-threshold counselling for everybody struggling with family or relationship issues (Bufdir, 2017).

children up to the age of 6, a kindergarten or primary school teacher completed a somewhat shorter survey with age-adapted questions about the child's development and well-being.

The present study did not participate in recruiting participants or collecting data but uses data that was already collected by the FamilieForSK study.

2.2 Participants and sample

As a longitudinal study, the FamilieForSK study has so far had four data-collection waves. The present study uses data from Wave 1, which was carried out between December 2017 and June 2020 and got replies from more than 2,300 families in total. In some families, one or both parents and their child(ren) participated, while in other families only the parent(s) or only the child(ren) participated. To be able to make conclusions about the association between parent and child responses, only data from the 650 families with responses from at least one parent and at least one child of age 6 or above (of the youngest three children participating in the study) was included in the present study.

Prior to data analyses, a detailed examination of the data was carried out to reveal obvious type errors and to check if responses about other family members were given about the *correct* family members. The latter was especially important for the present study because the analyses of RQ1 depended on correct matching of the family members' responses about each other. A systematic mismatch of parents' responses about their child(ren) caused by ambiguous wording in the parent survey was discovered, 26 families with comprehensive mismatches between parents' and child(ren)'s reports were excluded while all other inconsistencies were corrected. Since the wording of the child survey did not allow for distinct allocations of children's answers to their parents in case of same-sex parents, 13 families with same-sex parents were regrettably excluded. Further, 12 families who did not answer any of the relevant measures were excluded as well.

Thus, the final sample of the present study comprised 599 families, mainly families with only one participating child (n = 424). To regard RQ1, only one child per family was included in the analyses (from here on referred to as "child"). For families with two or three participating children (n = 175), one child was chosen by random. To regard RQ2, additional sibling-pairs were formed by including siblings from the 175 families in which the "child" had a participating sibling. In families where the child had two participating siblings, one of them was chosen by random. The sibling-pairs were categorized into the two groups of the younger and the older

sibling, respectively. Both groups are comparable to the sample from RQ1 by age, gender and birth country.

Table 1

Descriptive statistics of the sample's demographics

Demographics of parents and child	N	%	Mean	SD	Range
Participants' age					
Mothers' age [a]	522	100	40.6	5.8	25-57 years
Fathers' age [a]	466	100	43.3	6.5	29-63 years
Child's age	599	100	10.5	2.5	6-16 years
Number of children per parent [b]					
Mothers' number of children	520	99.6	2.3	0.8	1-6 children
Fathers' number of children	465	99.8	2.3	0.8	1-6 children
Child's gender (*n*=599)					
Girls	315	52.6			
Boys	284	47.4			
Participants' birth country					
Mothers' birth country (*n*=519)					
Norway	481	92.7			
Elsewhere	38	7.3			
Fathers' birth country (*n*=461)					
Norway	427	92.4			
Elsewhere	34	7.4			
Child's birth country (*n*=597)					
Norway	577	96.6			
Elsewhere	20	3.4			
Parents' employment situation					
Mothers' employment situation (*n*=522)					
Fulltime job (≥ 80%)	347	66.5			
Parttime job (< 80%)	56	10.7			
On parental leave	11	2.1			
Fathers' employment situation (*n*=464)					
Fulltime job (≥ 80%)	392	84.5			
Parttime job (< 80%)	19	4.1			
On parental leave	1	0.2			
The family's financial situation					
Mothers' report (*n*=522)					
Good or Very good	348	66.7			
Acceptable	150	28.7			
Bad or Very Bad	24	4.6			
Fathers' report (*n*=462)					
Good or Very good	309	66.9			
Acceptable	126	27.3			
Bad or Very bad	27	5.9			

[a] Parents indicated their year of birth, which was then subtracted from the year they participated in the study to obtain an approximation of their age.

[b] Including all of a mother's (or father's) children, both participating and non-participating in the study (e.g., children too old to participate or children with a different partner).

Table 1 shows the sample's basic demographic information. Participating mothers are on average 40.6 years old, which is two and a half years younger than fathers. The samples' children have an average age of 10.5 years and are covering a wide age range. There are two reasons why the age range is wider than the anticipated (7-15 years): First, some 6-year-olds that strongly wanted to participate were additionally interviewed while the interviewer was meeting the family for interviewing an older sibling. Second, some children recruited at age 15 turned 16 before their participation.

The average number of children per parent in the sample is 2.3 children, which is higher than the national average from 2019 (total fertility rate of 1.5 (women)/ 1.4 (men), Statistics Norway (Statistisk Sentralbyrå; 2021a, 2021b). Among the children in the sample, boys and girls are close to equally represented.

The sample has fewer participants born outside of Norway than the Norwegian population in general (15.8% in 2019, 16.2% in 2020, Statistics Norway 2021c).

For their current employment-situation, parents indicated on a categorical scale if they were in *fulltime work (≥ 80%)*, *parttime work (< 80%)*, *studying*, *on parental leave*, *sick/ disability leave*, *job-seeking*, or *other*. The majority of parents are currently employed, and fathers are more often in a fulltime job and less often on parental leave than mothers.

Appraisal of the family's economic situation was assessed with a single question "How is your family's financial situation?" measured on a 5-point Likert scale from *Very good* (1) to *Very bad* (5). Two out of three parents report the family's financial situation to be good or very good.

2.3 Measures

Different well-established scales were used to measure conflict between family members, the child's appraisal of interparental conflict, and parental conflict resolution from the perspective of both the parents and the child. English measures were translated to Norwegian according to common translation standards. The survey of the FamilieForSK study was more comprehensive than the measures chosen for the present study.

2.3.1 Interparental conflict – parent perception

Mothers' and fathers' perception of conflict with each other was measured with the Conflict and Problem Solving Scales (CPS; Kerig, 1996). The CPS measures four dimensions of interparental conflict, namely frequency, severity, resolution and efficacy, as well as a Conflict

Strategy Scale with six conflict strategies, namely avoidance, child involvement, cooperation, physical aggression, stalemate and verbal aggression.

In the present study, the Conflict Strategy Scale Short Form, a 36-item short form of the Conflict Strategy Scale, developed and validated with a Norwegian sample (Helland et al., 2021), was used. The Conflict Strategy Short Form has the same six subscales as the full Conflict Strategy Scale. For each statement, participants rate their own as well as their partner's conflict strategies. Items (e.g., "Me: Listen to the other's point of view" or "My partner: Say something to hurt the other's feelings") are rated on a 4-point Likert scale from *Never* (1) to *Often* (4). The additional response option *Not applicable (NA)* was coded as missing. Items from the cooperation subscale were reverse coded to maintain uniformity, so that higher scores equal greater lack of cooperation and thus, higher interparental conflict. A list of the items for all measures can be found in Appendix A (Tables A.1-A.7).

Due to low and partly negative correlations between the avoidance subscale and the other subscales, a principal component analysis (PCA) was carried out. The PCA showed that the three items of the avoidance subscale were mainly loading on one factor, while all other items were mainly loading on a second factor. Based on these findings, the items from the avoidance subscale were excluded while calculating the conflict scores. For each parent, a composite score was calculated as the average of item scores. Unlike the other measures, where obtained composite scores were deployed in only one of the two research questions, the composite scores from this measure were used in the analyses of both research questions.

The Conflict Strategy Scales of the CPS has shown to be a reliable and valid measure of interparental conflict in previous studies (Helland et al., 2021; Kerig, 1996). In this study, internal consistency reliability can be considered excellent for both mothers ($\alpha = .90$) and fathers ($\alpha = .90$), according to Yockey (2018). A list of the internal consistency reliabilities for all measures in the present study can be found in Appendix B (Table B.1).

2.3.2 Interparental conflict – child perception

The child's perception of interparental conflict was measured with the Children's Perception of Interparental Conflict Scale (CPIC; Grych et al., 1992), which measures nine subscales, namely content, coping efficacy, frequency, intensity, resolution, self-blame, stability, threat and triangulation. To keep the child's measure of interparental conflict as close to the parents' measure as possible, the present study uses only the Intensity Scale and a modified version of the Frequency Scale from the CPS.

The Intensity Scale comprises seven items, whereof six have been measured in the FamilieForSK study. Each item (e.g., "When my parents have an argument, they say mean things to each other") was answered on a 4-point Likert scale from *False* (1) to *Completely true* (4).

The modified version of the Frequency Scale consists of six self-made items about the frequency of interparental conflict strategies. These items were constructed by FamilieForSK on the basis of the original CPS Frequency Scale with wording that can easily be understood by children. Items (e.g., "Disagreed on many things") were answered on a 4-point Likert scale ranging from *Never* (1) to *All the time* (4). Reversed items were recoded, so that higher values reflect higher interparental conflict. In order to gain one total score for the child's perception of IPC, a composite score was calculated as the average of the 12 item scores from both scales.

The Intensity Scale from the CPIC has shown to be a reliable and valid measure of interparental conflict intensity in previous studies (Grych, 1992; Lucas-Thompson & George, 2017a). In the present study, internal consistency reliability can be considered fair for the Intensity Scale ($\alpha = .73$) and good for both the modified Frequency Scale ($\alpha = .84$) and the overall interparental conflict score ($\alpha = .85$).

2.3.3 Parent-child conflict – parent perception

The parents' perception of conflict with their children was measured with six items from the Conflict Scale from the Parental Environment Questionnaire (PEQ; Elkins et al., 1997). Items (e.g., "My child and I often get into arguments") were answered on a 4-point Likert scale from *Definitely false* (1) to *Definitely true* (4), with higher values reflecting higher conflict. For each parent, a composite score was calculated as the average of item scores.

The PEQ Conflict Scale has shown to be a reliable and valid measure for parents' perception of parent-child conflict in previous studies (Burt et al., 2003; Elkins et al., 1997). In this study, internal consistency reliability can be considered good for both mothers ($\alpha = .86$) and fathers ($\alpha = .88$).

2.3.4 Parent-child conflict – child perception

The child's perception of conflict with both mother and father was measured with four items each: Three of those items (e.g., "My mother and I often argue") came from the Conflict Scale from the Parental Environment Questionnaire (PEQ; Elkins et al., 1997) and one item ("I often get angry at my mother") was a self-made item. All items were answered on a 4-point Likert

scale from *Definitely false* (1) to *Definitely true* (4), with higher values reflecting higher conflict. For both child-mother conflict and child-father conflict, a composite score was calculated as the average of item scores.

The PEQ Conflict Scale has shown to be a reliable and valid measure for children's perception of parent-child conflict in previous studies (Elkins et al., 1997; Zhang et al., 2009). In this study, internal consistency reliability can be considered fair to good for both child-mother conflict ($\alpha = .78$) and child-father conflict ($\alpha = .82$).

2.3.5 Parental conflict resolution – parent perception

The parents' perception of parental conflict resolution was measured with a 4-item-short form of the Conflict Resolution Scale from the CPS (Kerig, 1996; Larsen et al., 2021). Items (e.g., "We stay mad at each other for a long time") were answered on a 4-point Likert scale from *Never* (1) to *Often* (4). Reversed items were recoded, so that higher values reflect better parental conflict resolution, and a total resolution score for both mothers and fathers was calculated as the average of item scores.

The Conflict Resolution Scale from the CPS has shown to be a reliable and valid measure of parental conflict resolution in previous studies (Kerig, 1996; Larsen et al., 2021; Warmuth et al., 2020). In this study, internal consistency reliability can be considered good for both mothers ($\alpha = .87$) and fathers ($\alpha = .86$).

2.3.6 Parental conflict resolution – child perception

The child's perception of parental conflict resolution was measured with five items from the Resolution Subscale from the Children's Perception of the Interparental Conflict Scale (CPIC) (Grych et al., 1992; Holt et al., 2020). Items (e.g., "Even after my parents stop arguing they stay mad at each other") were answered on a 4-point Likert scale from *False* (1) to *Completely true* (4). Reversed items were recoded, so that higher values reflect better parental conflict resolution, and a total resolution score was calculated as the average of item scores.

The Resolution Subscale from the CPIC has shown to be a reliable and valid measure for children's perception of parents' conflict resolution in previous studies (Grych et al., 1992; Holt et al., 2020; Lucas-Thompson & George, 2017a). In this study, internal consistency reliability can be considered fair ($\alpha = .78$).

2.4 Research ethics

As the present study is part of the FamilieForSK study, it is included in the study's approval from the Norwegian Centre for Research Data (NSD) and the Regional Committees for Medical and Health Research Ethics (REK; reference number 2017/143).

Since the survey collects sensitive data, it is especially important to protect the participants privacy (NESH, 2019, introduction). For this goal, the online survey was administrated by NSD WebSurvey, the Norwegian Centre for Research Data's (NSD) secure system for online data-collection, and the data is stored securely by the Services for Sensitive Data (TSD).

All participants gave their informed consent and answered the survey voluntarily. Parents gave consent for their child(ren) to be in the study and children assented before completing the survey. All participants were informed about the possibilities to skip questions, stop answering the survey or withdraw their consent at any given point without being asked for reasons. Parents were also able to withdraw consent given on behalf of their children at any time.

In the FamilieForSK study, children aged 7-15 were invited to participate actively. The National Committee for Research Ethics in the Social Sciences and the Humanities (NESH) claims that children and adolescents who participate in research are "particularly entitled to protection" (NESH, 2019, point 14). Therefore, special measures have been taken by the FamilieForSK study to protect the participating children: Information given to the children prior to, and during the survey was adapted to the age of the children. The content of the survey itself was carefully put together to suit the children's age. The interviewers who interviewed the children aged 7-11 received thorough training and had a particular focus on creating a safe atmosphere around the interview. Both during and after the interview, the interviewers were open to answering questions from the children and giving care if the child had reactions triggered by the interview (e.g., got upset or started crying). The children aged 12-15 who filled out the survey online where strongly encouraged to contact the study's contact person by e-mail if they had any questions and they could leave comments in the last question on the survey, an open text box. For example, about their experience completing the survey or about their family in general.

Due to the population of the study being families that in one way or another received help from a family counselling office one can assume that, during data collection, many of the participating families might be described as vulnerable. It is possible that participating in the study had negative effects on parents and especially on children such as increased awareness of difficulties concerning their family situation or their way of coping with their situation. This is

an ethical dilemma, since the aim of the study is to investigate exactly these families at a vulnerable phase, in order to better understand them and find better ways to meet their needs during this possibly difficult time. By all the information given and measures taken to support families when participating in the study, the intent was to minimize any negative effects for the participants and especially mitigate children's potentially negative reactions, so that the benefits resulting from the study's research would outweigh the possible downsides.

2.5 Analytical approach

All preliminary analyses and analyses pertaining to RQ2 were performed using IBM SPSS (Version 26). Analyses pertaining to RQ1 were carried out using R (Version 4.0.2) with the R packages fSRM (Schönbrodt et al., 2014), lavaan (Rosseel, 2012), lsr (Navarro, 2015) and psych (Revelle, 2020).

Model fit for the SRMs in RQ1 was interpreted according to the following cut-offs: $\chi 2$ with $p \geq .05$, RMSEA (Root Mean Square Error of Approximation) $\leq .06$, TLI (Tucker-Lewis Index) $\geq .95$ and CFI (Comparative Fit index) $\geq .95$ (Hu & Bentler, 1999; see also Hooper et al., 2008). The effect size of correlation coefficients was interpreted according to Cohen (1988), with $|r| \approx .10$ as small, $|r| \approx .30$ as medium and $|r| \approx .50$ as large effects, respectively. Internal consistency was interpreted according to the approximate guideline proposed by Yockey (2018, p. 47), with values of Cronbach's $\alpha < .60$ as poor, $\alpha \geq .60$ as marginal, $\alpha \geq .70$ as fair, $\alpha \geq .80$ as good and $\alpha \geq .90$ as excellent. The significance level was set to $p < .05$, as suggested by Fisher (1925).

For RQ1, missing data was handled by using the Full Information Maximum Likelihood (FIML) estimator, while for RQ2, missing data was handled by deleting cases pairwise.

2.5.1 Social Relations Model analyses (RQ1)

For the analysis of differences on the individual, relational and family level of family conflict perception in RQ1, SRM analyses were conducted for three-member families comprising mother, father and child. To tap the full potential of SRM analysis, a design with four or more family members is preferable. But even though the survey of the FamilieForSK study was carried out with siblings where possible, it did not contain conflict statements for conflict between siblings. Thus, not enough data was available for a design with two parents and two children. However, it is still possible to carry out SRM analysis with a three-member family as in the present study (Kenny et al., 2006, p. 245).

As described in Chapter 1.3, SRM calculates four underlying effects for statements made by the different family members about each other. As pictorialized in Figure 1, these four effects are the family-effect (characteristics of the specific family), the actor-effect (characteristics of the family member making the statement), the partner-effect (characteristics of the family member the statement is made about) and the relationship-effect (characteristics of the specific relationship that go over and above actor- and partner-effects) (Kenny et al., 2006, pp. 227-228). SRM analysis makes it possible to estimate both the variances of these four effects across families and correlations between selected effects, namely generalized and dyadic reciprocities.

Figure 1
SRM: Underlying effects of the mother's statement about the father
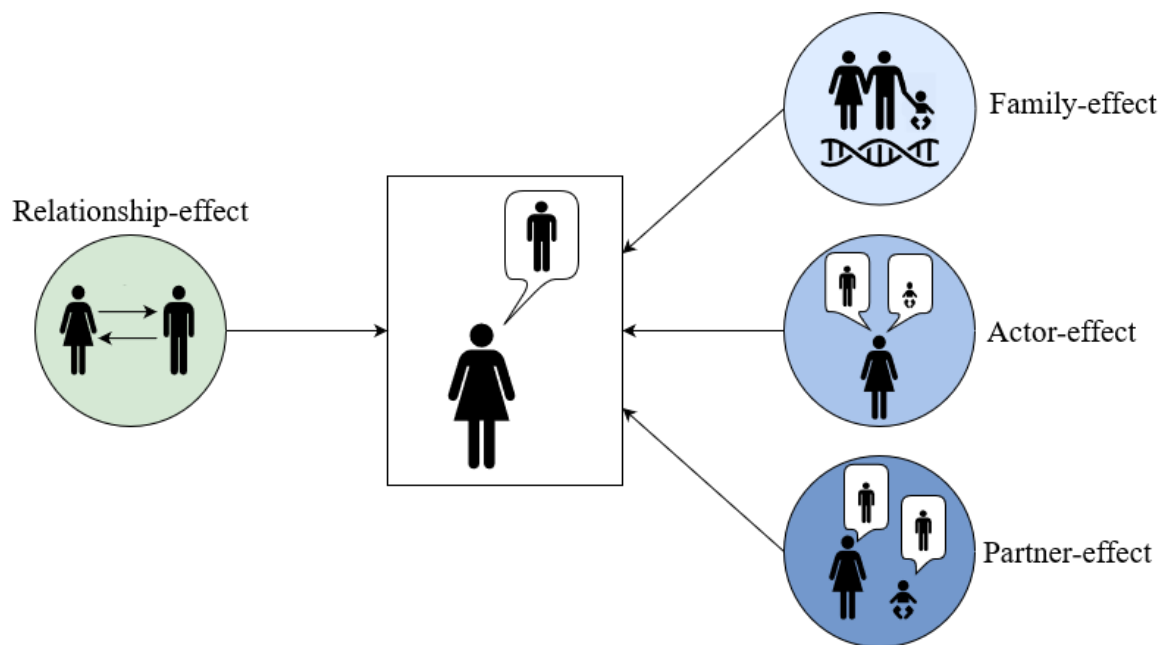
Note. Figure 1 displays a three-member-family with mother, father and child.

It is a common mistake to confuse SRM-effects and SRM-variances, but while "effects" should be used when referring to a particular family or score, "variance" should be used when referring to the whole sample (Kenny et al., 2006, pp. 189-199) and thus, the present study's focus is on the SRM-variances.

The family-variance describes how much different families vary in the general amount of conflict that the family members experience with one another. Findings of substantial family-variance would therefore indicate that, while some families experience generally high conflict, others experience generally low conflict. Findings of little or non-significant family-variance on the other hand would indicate that there are no such family-effect, or that families are quite similar in the general amount of conflict that family members experience with one another.

Actor-variances are computed separately for each family member. The mother's actor-variance for example describes how much mothers vary across families in the amount of conflict that they in general experience with other family members, namely the father and the child. Findings of substantial actor-variance for the role of the mother would indicate that, while some mothers do experience generally high conflict with the others in the family, other mothers do experience generally low conflict with the other family members. Findings of little or non-significant actor-variance for the role of the mother on the other hand would indicate that mothers across families are quite alike in how much conflict they experience with other family members in general. The same applies for the father's and the child's actor-variances.

Partner-variances are also computed separately for each family member. The mother's partner-variance for example describes how much other family members vary in the amount of conflict that they, across families, experience with the mother. Findings of substantial partner-variance for the role of the mother would indicate that, while some families do experience generally high conflict with the mother, other families do experience generally low conflict with the mother. Findings of little or non-significant partner-variance for the role of the mother on the other hand would indicate that across families, other family members are quite alike in how much conflict they experience with the mother in general. The same applies for the father's and the child's partner-variances.

Two relationship-variances are computed for each relationship, one for each angle of the relationship. There is for example one relationship-variance for the relationship of the mother with the father, and another for the relationship of the father with the mother. Each of them describes relationship-specific variance that has not been explained yet, neither by the associated actor-variance, nor by the associated partner-variance. The relationship-variance of the mother regarding the father for example exceeds both the mother's tendency to generally experience high (or low) conflict with others and the tendency that others experience generally high (or low) conflict with the father. Findings of substantial relationship-variance of the mother regarding the father would indicate that some mothers experience high, others low, relationship-specific conflict with fathers and that conflict that mothers experience with fathers is "uniquely determined by the specific relationship between [the parents]" (Kenny et al., 2006, p.185). Findings of little or non-significant relationship-variance of the mother regarding the father on the other hand would indicate that mothers are quite alike across families in the amount of relationship-specific conflict that they experience with fathers. The same applies for the other relationship-variances. When an SRM analysis is conducted with one measure per statement

only, the resulting relationship-variances will comprise the error-variances associated with the respective measures. This can be avoided, and error-variances can be separated from relationship-variances, if the analysis is conducted with two measures per statement, as described later (see subsection about Model C, pp. 23-24).

As mentioned earlier, SRM analysis also estimates correlations between selected effects i.e., reciprocities. There are two types of reciprocities, namely general reciprocity and dyadic reciprocity:

General reciprocities are the correlations between each family member's actor- and partner-effect and they are computed separately for each family member (Kenny et al., 2006, p. 228). Alike other correlations, they can be positive or negative (Kenny et al., 2006, p. 192). Positive mother's general reciprocity for example describes the strength of the association between her experience of general high (or low) conflict with other family members, and their experience of general high (or low) conflict with her. Negative mother's reciprocity on the contrary would imply that the more (or less) conflict mothers generally experience with others, the less (or more) conflict the others generally experience with her. The same applies for the father's and the child's general reciprocity.

Dyadic reciprocities are the correlations between the two relationship-effects of each relationship and are computed separately for each relationship (Kenny et al., 2006, p. 228). The dyadic reciprocity between the parents for example describes the strength of the association between the conflict that the parents experience with one another, independent of the specifics of the parents as actors and partners. A high correlation would indicate that in families where mothers experience high conflict with fathers, fathers also experience high conflict with mothers. The same applies for the relationships between the child and each parent.

Besides the estimation of the described variance-components and reciprocities, SRM analysis can also be used to estimate the means of the four effects across families. This is mainly useful for practitioners, as to be able to compare the means of a single family with group means (Kenny et al., 2006, p. 253). Therefore, the present study does not estimate means. As described by Kenny et al. (2006, p. 231-234), this estimation of variance components and reciprocities is conducted with a confirmatory factor analysis (CFA). As shown in Figure 2, the four types of effects work as factors that load on the conflict statements made by the family members, with all factor loadings fixed to 1, due to model requirements in a three-member model. General and dyadic reciprocities are displayed as two-sided arrows between these factors.

Figure 2

CFA-structure of the SRM-components in a three-member family with conflict statements
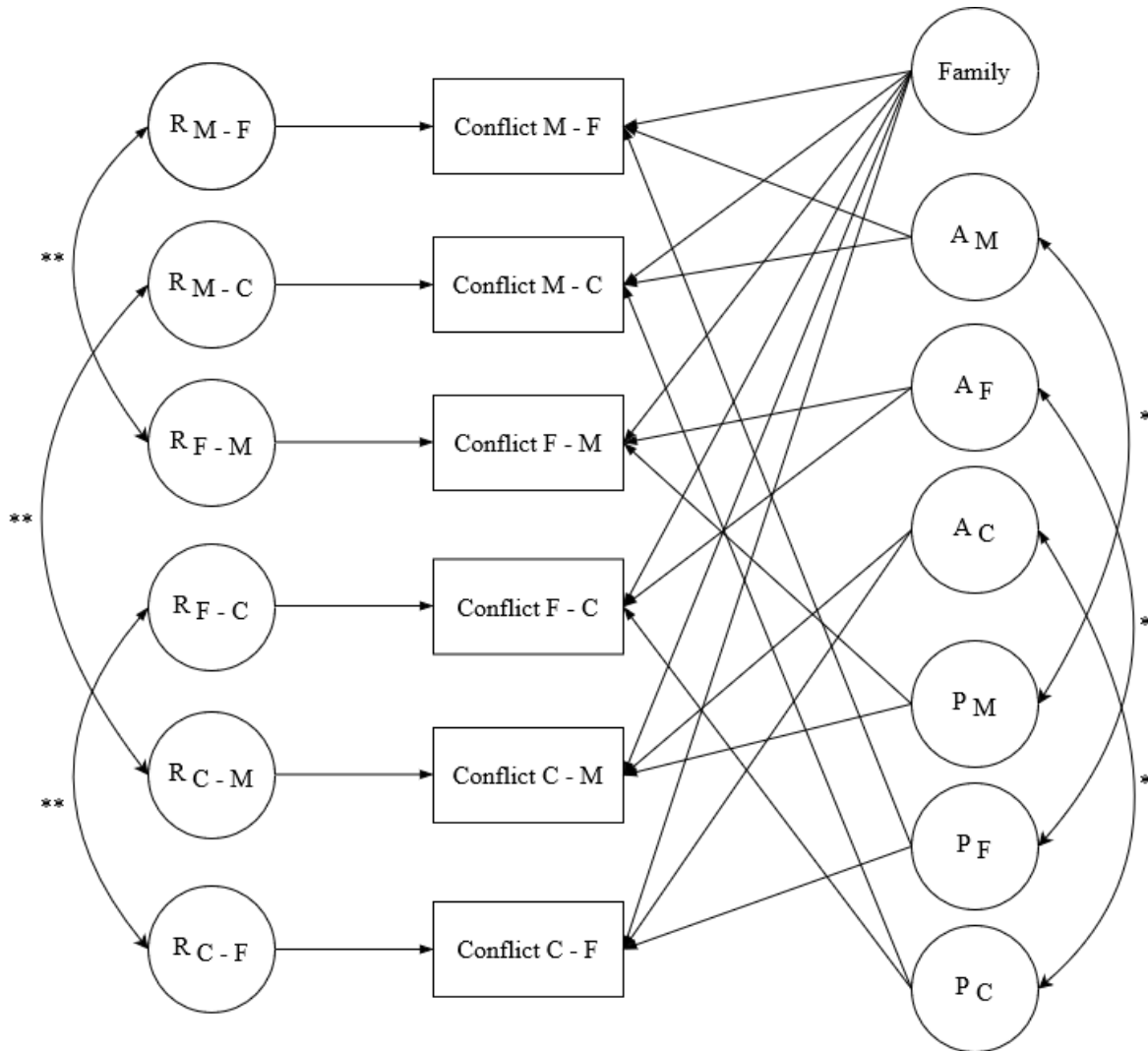
Note. M = mother; F = father; C = child; Circles symbolise latent variables, namely the four SRM-effects: Family = family-effect, A = actor-effect, P = partner-effect and R = relationship-effect (including error); Rectangles symbolise the manifest variable, namely the conflict statements, with the first letter standing for the family member making the statement and the second letter for the family member the statement is made about, e.g., Conflict $_{M-F}$ = mother's statement on conflict experienced with father; All directional arrows are loadings fixed to 1; The correlation between corresponding actor- and partner-effects (marked with *) are the generalised reciprocities, the correlations between corresponding relationship-effects (marked with **) are the dyadic reciprocities.

The SRM analyses were carried out with the help of the R package fSRM (Schönbrodt et al., 2014) as described by Stas et al. (2015). The fSRM package facilitates building SRM-models and varying them, and it comes with automatic adjustments of model constraints. As mentioned earlier, one important constraint in the analyses of the present study is the fixing of all factor loadings to 1. Another important constraint concerns the number of SRM components that can be specified in one model. In order to build a model with all described SRM components, data

from at least four family members is needed. With a three-member round-robin design as used in the present study, it is still possible to carry out an SRM analysis, but one SRM component needs to be dropped from the model. To nevertheless be able to account for all SRM components, three models were estimated with different components being dropped in each of them, as shown in Table 2.

Table 2

Model components

		Model A	Model B	Model C
SRM component	Family-effect	–	✓	✓
	Actor-effect	✓	✓	✓
	Partner-effect	✓	✓	✓
	Relationship-effect (including error)	✓	✓	–
	(separated from error)	–	–	✓
	General reciprocities	✓	–	–
	Dyadic reciprocities	✓	✓	✓
Measure(s) per conflict statement		1	1	2

In Model A, the family-effect was dropped, and the model was calculated with the remaining effects, namely the actor-, partner- and relationship-effect as well as general and dyadic reciprocities. Dropping the family-effect is quite common in three-person-SRM, since earlier research has shown that this effect tends to be generally small and thus, discarding this effect retains the maximum amount of information (Kenny et al., 2006, p. 250).

In Model B, general reciprocities are dropped instead of the family-effect, and Model B comprises therefore family-, actor-, partner- and relationship-effects as well as dyadic reciprocities. As an alternative to dropping the general reciprocities, it would have been possible to drop all the actor- or all the partner-effects (both including also dropping the general reciprocities) from the model. These alternative models were carried out but are not reported in the present study since they had very bad fits, indicating (by comparison to the fits of Models A and B) that actor- and partner-effects do make relevant contributions and should not be dropped.

Model C contains the same effects and dyadic reciprocities as Model B but was moreover conducted with two measures per conflict statement. While neither Model A nor B are able to differentiate between relationship- and error-variances, Model C with two measures per conflict statement allows the calculation of separate relationship- and error-variances. As suggested by Kenny et al. (2006, p. 246), the two measures per statement were created by dividing the items

that form the composite scores used in Models A and B into two equal parcels. The composite score for each parcel was then calculated as the average of the parcels' item scores.

In both Models B and C, the partner-variances of the mother were initially negative. Since variances cannot be negative, the final Models B and C were calculated with the constraint of variances to be equal or greater than zero.

After estimating all three models, the research questions RQ1.1 to RQ1.3 were answered by examining and comparing the outputs of the SRM analyses of the three models.

2.5.2 Correlation analyses (RQ2)

For the analysis of associations between parent and child perceptions of IPC and parental conflict resolution in RQ2, correlation analyses with the Pearson correlation coefficient were conducted. They were tested for significance and compared across family members and between generations to examine the interrelationship between the family members' perception of interparental conflict (RQ2.1) and parental conflict resolution (RQ2.2). Further, the correlation between each family member's perception of IPC and parental conflict resolution was conducted (RQ2.3). Pairwise comparisons between correlation coefficients as described by Eid et al. (2017, pp. 578-579) were carried out with the *Psychometrica online calculator* (Lenhard & Lenhard, 2014). These are comparisons of correlations from dependent samples, which implies that each comparison between the two correlations r12 and r13 requires the input of the three correlations r12, r13 and r23 from the same sample. In order to include data from as many families as possible in these comparisons, additional correlation analyses with the Pearson correlation coefficient with listwise deletion of missing cases were conducted, one triad of correlations at a time. Where needed, additional scatterplots were examined visually to gain a deeper understanding of the interrelationship in question.

3. Results

In this chapter, the descriptive statistics of the study measures are presented, followed by the results from the SRM analyses used to address RQ1. Finally, the results from the correlation analyses used to address RQ2 are presented.

3.1 Descriptive statistics

Table 3 shows the basic distribution properties (mean, standard deviation and range), as well as skewness and kurtosis for all measures involved in the present study.

Table 3

Descriptive statistics of all study measures, reported by parents and children

Measure (scale)	Reporting family member	N	M	SD	Range [a]	Skewness	Kurtosis
Interparental conflict (CPS)	Mother	475	1.99	0.41	1-3.03	-0.14	-0.41
	Father	431	1.90	0.40	1-3.25	0.10	-0.30
Parent-child conflict (PEQ)	Mother	443	1.58	0.51	1-3.83	0.95	0.80
	Father	376	1.63	0.54	1-3.33	0.86	0.09
	Child on mother	406	1.62	0.61	1-4	0.99	0.59
	Child on father	400	1.53	0.63	1-4	1.45	2.18
Interparental conflict (CPIC)	Child	476	1.76	0.51	1-3.86	1.00	1.32
	Younger sibling	146	1.71	0.46	1-3.83	1.18	2.78
	Older sibling	143	1.69	0.45	1-3.17	0.79	0.53
Parental conflict resolution (CPS)	Mother	477	2.46	0.76	1-4	-0.11	-0.82
	Father	429	2.58	0.73	1-4	-0.04	-0.74
Parental conflict resolution (CPIC)	Child	475	3.04	0.66	1-4	-0.36	-0.57
	Younger sibling	147	3.11	0.62	1.4-4	-0.46	-0.36
	Older sibling	142	3.08	0.65	1.4-4	-0.53	-0.55

Note. Child-reported interparental conflict and parental conflict resolution, respectively, include all children in the study, while reports from younger (and older) sibling only include children from families with at least two children. Therefore, the sample size for child is greater than the sum of younger and older sibling. All other variation in sample size is due to skipped questions.

[a] The potential range is 1-4 for all scales.

Skewness measures for the parents' report of IPC indicate approximately symmetric distributions. All other conflict scales show positive skews, indicating an emphasis of scores on the lower part of the scale. This implies that most families report low levels of parent-child conflict, and most children report low levels of IPC. The resolution scales show approximately symmetric distributions for the parents' reports and negative skews for the children's report, indicating an emphasis of scores on the higher part of the scale, implying that most children report good parental conflict resolution. Kurtosis measures indicate that all resolution scales and the parent's report of IPC have a more flat-topped and wide-tailed distribution, while all

other conflict scales have a more high-peaked and short-tailed distribution than normal distributions would have.

To determine whether these skewness and kurtosis measures threaten the assumption of normality, normality testing adapted to sample size was applied as proposed by Kim (2013). For all measures with $n > 300$ (i.e., all measures except the ones for younger and older siblings) histograms were examined and cut-offs for skewness ± 2 and kurtosis ± 7 were applied (Kim 2013, p. 53; West et al. 1995, p. 74). By that, all of these measures can be assumed normally distributed. For the remaining measures with $50 < n < 300$ (i.e., the measures for younger and older siblings), z-tests were conducted, with z-values calculated by dividing the skewness (kurtosis) values by their standard errors, and assuming normality for z-values ≤ 3.29 (Kim, 2013, p. 53). By that, normal distributions can be assumed for both siblings' resolution measures, but not for their measures of IPC (younger siblings: z = 5.87; older siblings: z = 3.88). The two non-normal measures were not transformed because their positive skewness was expected and corresponds with the positive skewness of the other participants' measures on IPC. Instead, results including the siblings' IPC-measures were interpreted with caution.

All scales were examined for outliers. Few to no outliers were found for the parents' report of IPC and the resolution scales, while a varying number of outliers with high values were found for the scales of parent-child conflict as well as the children's report of IPC (for boxplots with outliers, see Appendix C, Figure C.1). These outliers represent rare cases of high conflict and thereby add valuable variance to the respective conflict scales which otherwise have rather low means. As 5% trimmed means did not lead to noteworthy changes in means either, outliers were kept for further analyses.

As described in Chapter 2.5.1, three SRM models were conducted for RQ1. Model A drops the family-effect and comprises all other SRM effects, namely actor-, partner- and relationship-effect, as well as reciprocities. Model B comprises the same effects as Model A but drops general reciprocity and adds the family-effect. Model C contains the same effects as Model B and was moreover conducted with two measures per conflict statement to separate relationship-variance from error-variance. As shown in Table 4, Models A and B showed very good fits to the data, with non-significant χ^2 test-statistics and excellent model fit indices. Model C showed a poorer fit to the data, with excellent fit statistic in terms of CFI, but the χ^2 test-statistic was significant and RMSEA was larger and TLI smaller than for Models A and B. A likely explanation for the poorer fit of Model C is its higher complexity compared to Models A and B. Nevertheless, it was included in the present study because it gives a valuable indication of

the approximate size of the relationship-variance when separated from the error-variance. These results suggest that the data is suitable for conducting reliable SRM analyses.

Table 4

Model fit

Model	χ^2			RMSEA [90% CI]	TLI	CFI
	Value	df	p			
A: Basic effects	2.616	3	. 455	0 [0, 0.066]	1.006	1
B: Added family-effect [a]	4.152	5	.528	0 [0, 0.052]	1.008	1
C: Added family-effect + separated error [b]	122.672	26	.000	0.079 [0.065, 0.093]	.899	.96

Note. RMSEA = root-mean-square error of approximation; CI = confidence interval; TLI = Tucker Lewis index; CFI = comparative fit index.

[a] General reciprocity is dropped from the model to be able to add the family-effect.

[b] General reciprocity is dropped from the model to be able to add the family-effect. In addition, items for each measure are divided in two parcels to allow the separation of the error from the relationship-effect.

3.2 Similarities and differences in family conflict perception (RQ1)

3.2.1 Differences on the individual, relational and family level (RQ1.1)

As displayed in Table 5, the size of the different SRM components varies slightly between the three models, while significance levels of the components are quite alike across the models.

Table 5

Variance decomposition of SRM components

SRM Component	Variance		
	Model A	Model B	Model C
Family	–	0.015*	0.015*
Actor			
Mother	0.027**	0.012	0.006
Father	0.048***	0.031***	0.025**
Child	0.180***	0.167***	0.136***
Partner			
Mother	0.005	0.000	0.000
Father	0.018	0.000	0.003
Child	0.098***	0.084***	0.072***
Relationship			
Mother – father	0.121***	0.139***	0.125***
Mother – child	0.104***	0.151***	0.124***
Father – mother	0.137***	0.112***	0.101***
Father – child	0.180***	0.164***	0.136***
Child – mother	0.148***	0.187***	0.140***
Child – father	0.193***	0.209***	0.165***

* p < .05 (1-tailed). ** p < .01 (1-sided). *** p < .001 (1-tailed).

Family-variance was only computed in Models B and C. There, the family-variance component gets significant, but is rather small compared to the other components.

Actor-variances get significant for all family members in Model A, and for both fathers and children in Models B and C. In all models, the children have by far the highest actor-variance. Significant actor-variance for children indicates that children from different families vary in the amount of conflict that they in general experience with the other family members. While some children generally experience a lot of conflict with their parents, others experience little conflict.

In all models, partner-variance is significant only for children. This indicates that the amount of conflict that other family members (e.g., the parents) experience with their child, varies between families. While parents in some families generally experience a lot of conflict with their child, parents in other families experience little conflict with their child. The models indicate further that families are quite alike in the amount of conflict that other family members experience with mothers and fathers in general.

In all models, relationship-variances are significant for all relationships, with the highest variance-values for the relationship between child and parents (from the child's point of view) and between father and child (from the father's point of view). Relationship-variance refers to the share of variance that is specific for one relationship from someone's point of view, and that is not due to actor- or partner-effects but to characteristics of this specific relationship.

As shown in Figure 3, the distributions of the relative variance decompositions show parallel patterns across the three models with approximately similar proportions of the different variance components in each conflict statement.

Figure 3

Relative variance decomposition of the SRM components for all conflict statements
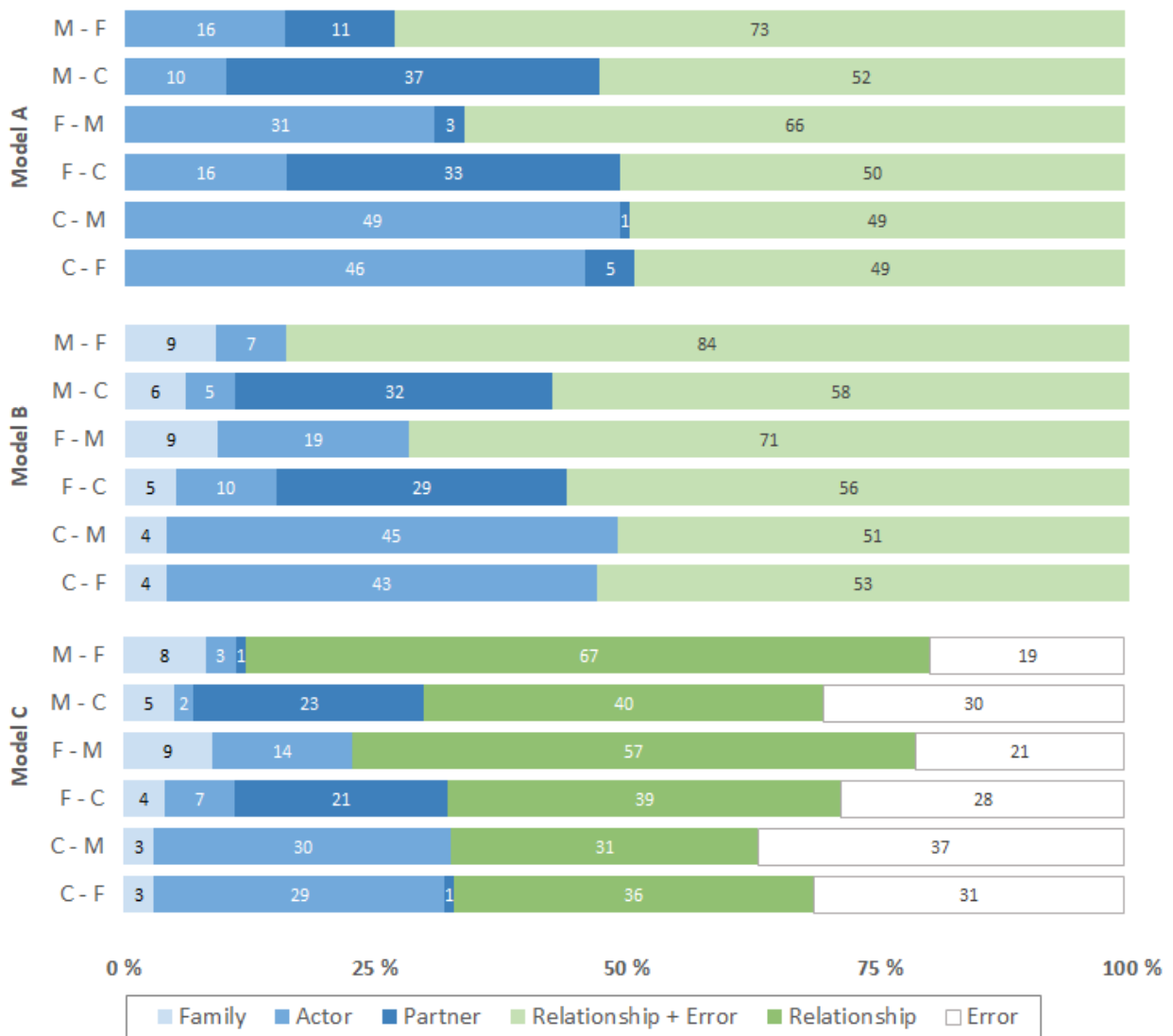
Note. M = mother; F = father; C = child. The first letter stands for the family member making the statement, the second letter stands for the family member the statement is made about, e.g., M - F = mother's statement on conflict experienced with father. The numbers on the variance components are their relative size in percentage.

Due to model specifications, no family-variance was computed for Model A and error-variance was separated from the relationship-variance only for Model C. Even though Model C needs to be interpreted with caution due to a poorer model fit, the distribution of error-variance in Model C indicates that about half of the relationship-error-variance in Models A and B is error-variance.

Even though the variance components differ between the six conflict statements, three patterns of similar variance decomposition can be found.

First, the parents' statements about each other are similar as both have mainly relationship-variance and only little partner-variance. In Models B and C, these two statements are also the ones with the highest amount of family-variance, compared to the other statements. The parents' statements about each other here are different though, regarding actor-variance, as the mother has little actor-variance while the father has a fair amount of actor-variance, round about double compared to the mother.

Second, the parents' statements about the child are similar because they have a high amount of partner-variance (also the highest amount of partner-variance compared to the other statements), a high amount of relationship-variance but only a small amount of actor- and family-variance.

Third, the child's statements about the mother and the father are similar because they have a high amount of actor- and relationship-variance, while they have little to no partner- and family-variance.

With generally high relationship-variances for all statements, medium to high actor-variances for child and father, and high partner-variances for the child, the *relative* variance decomposition reflects the main findings from the variance decomposition (Table 5).

3.2.2 Differences in generalized and dyadic reciprocities (RQ1.2)

As shown in Table 6, generalized reciprocities are only specified in Model A. There, only fathers have a significant positive correlation between their actor- and their partner-effect. This large correlation indicates that there is a strong association between fathers who themselves experience a lot of (or little) conflict with other family members, and whom others experience a lot of (or little) conflict with.

Table 6 also shows that dyadic reciprocities are similar in both size and statistical significance across the three models. Both the parent's relationship-variances with each other and mother's and child's relationship-variance correlate significantly. The correlation between the parents is large, the one between mother and child is medium in size.

Table 6

Generalized and dyadic reciprocities

Reciprocity	Model A		Model B		Model C	
	Reciprocity correlation	Z	Reciprocity correlation	Z	Reciprocity correlation	Z
Generalized						
Mother	.981	0.686	–	–	–	–
Father	.712	2.184*	–	–	–	–
Child	.072	1.353	–	–	–	–
Dyadic						
Mother – father	.575	4.236***	.656	8.087***	.738	8.058***
Mother – child	.298	2.693**	.340	4.042***	.443	3.995***
Father – child	.087	0.738	.163	1.684	.134	1.075

Note. Due to model specifications, generalized reciprocity was only computed for Model A.

* $p < .05$ (1-tailed). ** $p < .01$ (1-sided). *** $p < .001$ (1-tailed).

3.3 Associations between parents' and children's perceptions (RQ2)

3.3.1 Associations between parents' and children's perceptions of IPC (RQ2.1)

Results from the correlation analyses show positive and significant correlations between family members' perception of IPC ranging from .23 to .59. The strongest associations were the large correlation between the parent's report of IPC, followed by the medium to large correlation between siblings. Correlations across generations were small to medium size, ranging from .23 to .46. The parent's correlation with the older sibling was stronger than with the younger sibling, and finally, children, as well as younger and older siblings, had a slightly stronger correlation with mothers than with fathers. See Table 7 for an overview of the correlations. Further pairwise comparisons between the correlation coefficients showed that there are no significant differences between parents, not between child-mother and child-father correlations, nor between the equivalent correlations of younger and older siblings with their parents (see Appendix D, Table D.1). Nonetheless, significant differences were found between siblings for the correlations mother-younger sibling and mother-older sibling ($z = -3.358$, $p = 0$), as well as for the correlations father-younger sibling and father-older sibling ($z = -1.641$, $p = .05$).

Following up the question whether this difference between siblings could simply be explained by age, additional analyses were carried out, inspecting boxplots of the siblings' perception of IPC (Appendix C) for differences in distributions between siblings, and inspecting additional scatterplots (Appendix E, Figures E.1 and E.2) of both siblings' perception of IPC in relation to the siblings' age. Boxplots were found to be similar in distribution for both siblings, and no

general trend of older children reporting more (or less) IPC than younger children was found in the scatterplots.

Table 7

Correlations between the family members' perceptions of IPC

Perception of IPC		1	2	3	4	5
1. Mother	Pearson correlation	–				
	N					
2. Father	Pearson correlation	.59**	–			
	N	336				
3. Child	Pearson correlation	.37**	.29**	–		
	N	383	341			
4. Younger sibling	Pearson correlation	.24**	.23**	N/A	–	
	N	125	112			
5. Older sibling	Pearson correlation	.46**	.34**	N/A	.48**	–
	N	125	111		124	

Note. N/A = Not applicable: The younger and older siblings are partly included in the child sample. Therefore, correlations between them were not conducted.

** p < .01 (2-sided).

3.3.2 Associations between parents' and children's perceptions of parental conflict resolution (RQ2.2)

Results from the correlation analyses show positive correlations between family members' perception of parental conflict resolution ranging from .14 to .46. All correlations except for the one between the mother and the younger sibling were significant. The strongest association was the medium size correlation between the parent's report of parental conflict resolution, followed by the medium size correlations between siblings, and between parents and older sibling. All other correlations were small, ranging from .14 to .25. The parent's correlation with the older sibling was stronger than with the younger sibling, and finally, older siblings had a slightly stronger correlation with mothers than with fathers, while it was the other way around for younger siblings and the children from the main sample. See Table 8 for an overview of the correlations. Further pairwise comparisons between the correlation coefficients showed that there are no significant differences between parents, not between child-mother and child-father correlations, nor between the equivalent correlations of younger or older siblings with their parents (see Appendix D, Table D.2). Nonetheless, significant differences were found between siblings for the correlations mother-younger sibling and mother-older sibling ($z = -3.221$, $p = .001$), as well as for the correlations father-younger sibling and father-older sibling ($z = -2.04$, $p = .013$).

As for RQ2.1, additional analyses were carried out to test whether the difference between siblings could simply be explained by age. Boxplots of the siblings' perception of parental conflict resolution (Appendix C) were inspected for differences in distributions between siblings, as well as additional scatterplots with both siblings' perception of parental conflict resolution in relation to the siblings' age (Appendix E, Figures E.3 and E.4). Like for RQ2.1, boxplots were found to be similar in distribution for both siblings, and no general trend of older children reporting more (or less) parental conflict resolution than younger children was found in the scatterplots.

Table 8

Correlations between the family members' perceptions of parental conflict resolution

Perception of parental conflict resolution		1	2	3	4	5
1. Mother	Pearson correlation	–				
	N					
2. Father	Pearson correlation	.46**	–			
	N	336				
3. Child	Pearson correlation	.20**	.25**	–		
	N	382	339			
4. Younger sibling	Pearson correlation	.14	.20*	N/A	–	
	N	125	113			
5. Older sibling	Pearson correlation	.38**	.34**	N/A	.35**	–
	N	126	110		125	

Note. N/A = Not applicable: The younger and older siblings are partly included in the child sample. Therefore, correlations between them were not conducted.

* p < .05 (2-sided). ** p < .01 (2-sided).

3.3.3 The relationship between perceptions of IPC and parental conflict resolution (RQ2.3)

Results from the correlation analyses show negative and significant correlations between the perception of IPC and parental conflict resolution for all family members. All correlations are large and are ranging from -.62 to -.64. See Table 9 for an overview of the correlations.

Table 9

Correlations between each family member's perception of IPC and parental conflict resolution

Perception of IPC	Perception of parental conflict resolution				
	1.	2.	3.	4.	5.
1. Mother (*n*=456)	-.61**				
2. Father (*n*=420)		-.62**			
3. Child (*n*=472)			-.63**		
4. Younger sibling (*n*=146)				-.62**	
5. Older sibling (*n*=142)					-.64**

** $p < .01$ (2-sided).

A closer inspection of the scatterplots for all family members however indicates a more nuanced association between IPC and parental conflict resolution.

For children, there is an obvious negative linear association between IPC and parental conflict resolution. Scatterplots also show that most of the children report good parental conflict resolution and medium to low IPC, and only few children report poor parental conflict resolution and/or high conflict.

For parents, there also is a clear negative linear association. In addition, another pattern comes apparent, though. While almost all parents with high IPC (red in Figure 4) do experience poor parental conflict resolution, all the parents with low IPC (yellow in Figure 4) do experience good parental conflict resolution. The majority of parents with medium high IPC (orange in Figure 4) varies in how much parental conflict resolution they experience. Please note that Figure 4 displays the fathers, as their graph displays the described pattern clearest. The corresponding graph for the mothers looking similar and can be found in Appendix F (Figure F.1).

Figure 4

Scatterplot of fathers' perceptions of IPC and parental conflict resolution
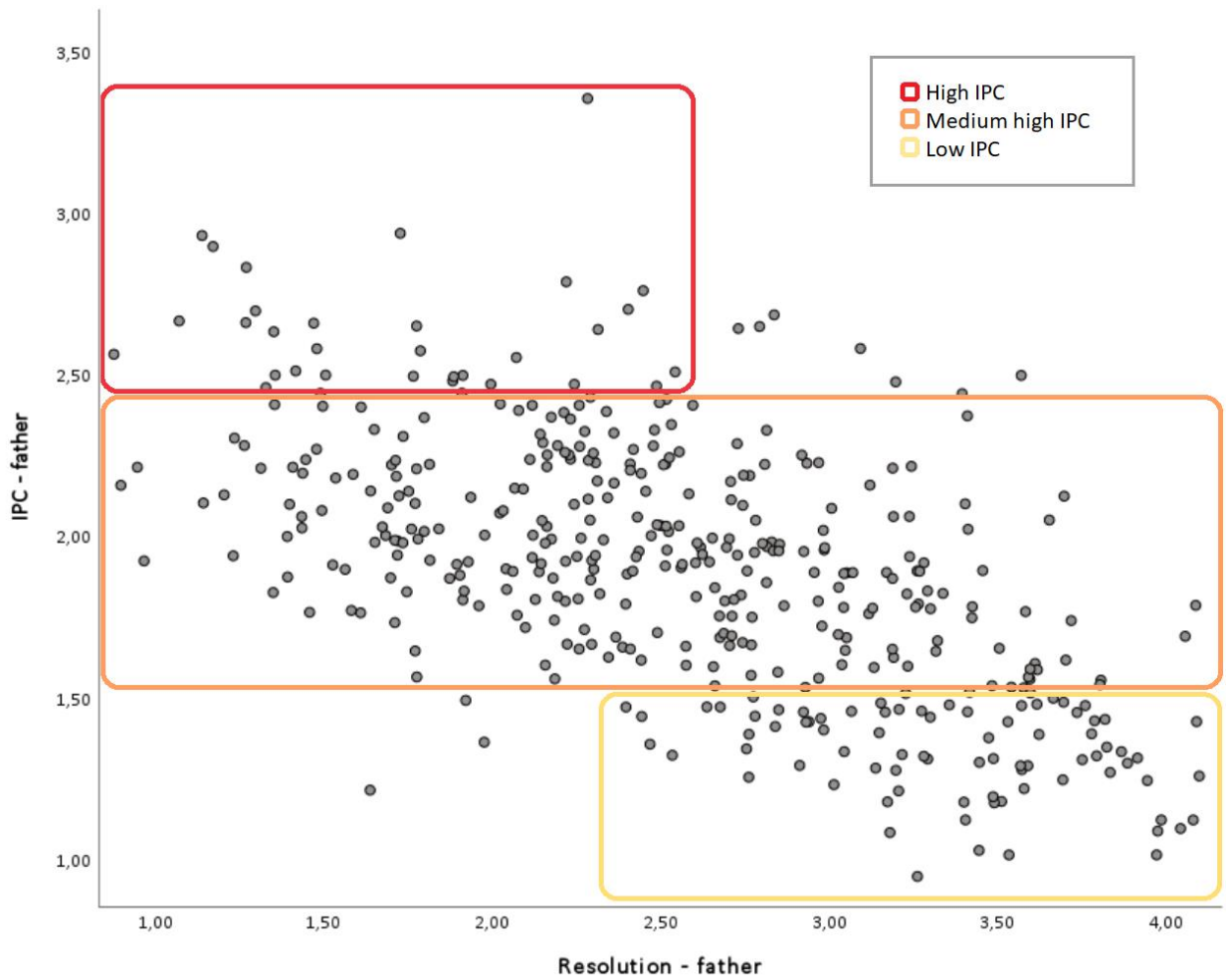
4. Discussion

Family dynamics and conflict in families are best understood from a multi-informant perspective (Holt et al., 2021). The aim of the present study was to explore family conflict dynamics, both through the exploration of differences on the individual, relational and family level of family conflict perception (RQ1) and by exploring associations between parent and child perspectives on IPC and parental conflict resolution (RQ2). In this chapter, the findings of the present study are discussed and finally, strengths and limitations of the present study are presented.

4.1 Differences on the individual, relational and family level of family conflict perceptions (RQ1.1)

Addresses the question if family members differ in the way that their conflict perception differs on the individual, relational or family level, results from SRM analyses (see Chapter 3.2.1) are generally nearly as anticipated, with actor- and relationship-effects accounting for larger amounts of variance, and partner- as well as family-effects accounting for smaller amounts of variance.

Results from Model A show that mothers, fathers and children from different families vary in the amount of conflict that they in general experience with the other family members. This effect is largest for children, clearly lower for fathers and lowest for mothers. Results from Models B and C even seem to indicate that there are only actor-effects for fathers and children, but none for mothers. This means that while some fathers (or children) generally experience a lot of conflict with the other family members, other fathers (or children) experience generally little conflict. It also means that the general amount of conflict that mothers experience and that can be explained by characteristics of mothers, is about the same for all mothers across different families.

One possible explanation for the distinct high amount of actor-variance for children is that, whether a child experiences little or much conflict with its parents depends a lot on characteristics of the child itself such as the child's age. Children participating in the present study cover a wide age-range (6-16 years) and this may be related to the observed effect. Another possible explanation could be a kind of generational effect or bias due to the three-member family design used in the SRM, where children did only rate the conflict with each of the adults, while each adult rated the conflict both with the other adult and the child

(Eichelsheim et al., 2009). This line of thinking suggests that the high amount of actor-variance partly reflects that children only gave between-generation conflict statements, while parents gave both between- and within-generation conflict statements.

In all three tested models, partner-variances for the parents accounts for low amounts of variance, whereas results show an unexpected high amount of partner-variance for the child. This means that there is little to no variation amongst families in the amount of conflict that other family members experience with the mother (or the father), due to characteristics of the mother (or the father). And there are some parents who experience a lot of conflict with their child due to child characteristics while other parents experience little conflict with their child due to child characteristics. Since children can be very different, it makes intuitively sense that the parents' experience of conflict with their child depends a lot on characteristics of the child. This idea has received some empirical support with previous research showing that influence between parents and children indeed can be bidirectional (Silverman et al., 2009) and that child characteristics can – over time – influence parents, in the form of negative feelings, depressive or anxious symptoms (Brooker et al., 2015; McAdams et al., 2015). While purely speculative, the high amount of child partner-variance observed in the present study could be related to the recruitment procedure of the FamilieForSK study. Namely, participating families were recruited at family counselling offices, which in turn may have led to the sample comprising many parents who were attending counselling because of high conflict with their children.

Turning to relationship-variance, all three tested models show that relationship-variances do account for high amounts of variance in all relationships. The separation of the error from the relationship-variances in Model C indicates that the "real" relationship-variances might be clearly smaller than the estimations in Models A and B. However, this does not undermine the importance of relationship-variances, as they still account for great amounts of variance in all relationships in Model C. Using mothers' ratings of conflict with fathers, high relationship-variance for the relationship between mothers and fathers indicates that while some mothers experience low conflict with fathers due to specifics of the mother-father relationship, other mothers experience high conflict for the same reasons. These specifics of the relationship could for example be the mother's tendency to generally experience a lot of (or little) conflict with the father, not necessarily because the mother experiences a lot of (or little) conflict with everybody, nor necessarily because the father is someone that everybody experiences a lot of (or little) conflict with. But because the mother experiences conflict that (for her) is unique to her relationship with the father, which could be everything from small, reoccurring

disagreements about who needs to do the dishes, to more general differences in aims in life. Either way, it shows that conflict is a dyadic phenomenon, and highlights the general importance of the relationship level, which makes especially sense in the light of the systemic perspective and its focus on relationships and interactions between family members.

Finally, and as shown in Models B and C, family-variance only accounts for very low amounts of variance. This implies that there are no big differences between families in such a way that family-related factors account for high or low conflict between family members.

Further analyses of the unique distributions of the different variance-shares for each conflict statement reveal three patterns. First, the way parents perceive conflict with each other is quite similar and is mainly characterized by large relationship-specific shares. This indicates that mothers' and fathers' perceptions of conflict with each other is similarly influenced by characteristics of the parental relationship. Second, the parents' statements about the child are also quite alike in distribution of variance-shares and stand out because these statements have large partner-specific shares. As discussed earlier, this indicates that characteristics of the child are an important influence on the parents' perception of conflict with the child. And finally, the child's statements about the parents are similar in their patterns and stand out because they have by far the highest actor-shares. This highlights the high degree to which child characteristics influence the child's perception of conflict with its parents.

4.2 Differences in generalized and dyadic reciprocities (RQ1.2)

As described in Chapter 2.5.1, reciprocities are correlations between different SRM-effects. Generalized reciprocity is the degree to which one's general experience of conflict with others is met by the others' general experience of conflict with them. Dyadic reciprocity is the degree to which two family members experience conflict with each other that (for both of them) is specific to that relationship. Results from Chapter 3.2.2 show that against expectations, only dyadic reciprocity for the parent-relationship would reach significance. Further, generalized reciprocity for fathers and dyadic reciprocity both in the mother-father and the mother-child relationship reached significance.

The fathers' strong positive correlation for generalized reciprocity indicates a mutual relationship of conflict experiences by and experiences with the father. That is, when fathers experience a lot of (or little) conflict with mothers and children, mothers and children are more likely to also experience a lot of (or little) conflict with the father. This could possibly be explained by a variation of the spillover hypothesis (Engfer, 1988; Erel & Burman, 1995). That

is, a father that experiences conflict with the mother might feel irritated or angry, something that could both spill over to his relationship with the child and "spill back" to the mother, resulting in child and mother experiencing more conflict with the father. Interestingly, results do not reveal similar associations for mothers or children, which makes this association unique for fathers.

The parents' dyadic reciprocity correlation is rather large which shows its particular importance and implies a strong association between the two relationship-specific effects that take place in the conflict between parents. For both mothers and fathers, there is something unique to conflict in the relationship with one another. This goes over and above individual aspects of the mother (or father) being the person perceiving conflict, and the father (or mother) being the person whom conflict is perceived with. The same logic applies for the relationship between mothers and children, although the association between their two relationship-specific effects is smaller, yet still of importance.

4.3 Associations between parents' and children's perceptions of IPC (RQ2.1)

Exploring the association between parents' and children's perceptions of IPC, general results from the correlation analyses (see Chapter 3.3.1) show significant and positive associations between all family members' perceptions of IPC. These findings are consistent with previous research (Lucas-Thompson & George, 2017a, 2017b) and indicate that the family members' perception of IPC is generally similar to each other in terms of any one family member's perception of higher IPC is connected to perceptions of higher IPC amongst the other family members. The same applies the other way around for any one family member's perception of lower IPC being connected to perceptions of lower IPC amongst the other family members.

Results show further that these associations are strongest within the same generation, that is between parents or between siblings, respectively. This implies that family members experience IPC more similarly within the same generation than to across generations. This may be related to subtle differences in the way adults and children perceive IPC that goes beyond the general consensus on what is considered to be higher or lower IPC. Alternatively, it may be that parents' perception of IPC "from the inside" of the conflict is different to the children's perception of IPC "from the outside".

Cross-generational correlations were overall lower than within-generational correlations. Further results from additional analyses of cross-generational correlations show that children (as well as younger and older siblings) did not differ significantly in terms of their correlations with mothers and their correlations with fathers. Thus, children (as well as siblings) have associations of equal strength with both of their parents. Parents on the other hand have a significant stronger correlation with the older sibling compared to the younger sibling. Further, results indicate that there are no tendencies of older children reporting generally higher (or lower) levels of IPC than younger children, ruling out age-related reporting tendencies as an explanation for the differences between siblings. A possible explanation though could be that there are sibling differences in conflict exposure (Lucas-Thompson & George, 2017a, p. 937). These could be caused by older siblings having experienced more IPC in total, or by younger siblings being more shielded from IPC. Either because parents are more aware of shielding younger sibling from IPC than older siblings, or because older siblings take responsibility for shielding their younger siblings from IPC. Either way, this would leave older siblings more exposed and therefore "closer" to IPC, making their perception of IPC more similar to the parents' perception than the younger siblings' perception is to the parents' perception. Another possible explanation could be that older siblings are more mature than their younger siblings. This would enable them to understand IPC better or more "correct" and therefore makes them perceive IPC more similar to how their parents perceive it, compared to their younger siblings that perceive IPC more different than the parents.

Although it is not possible to draw conclusions from the mechanisms behind these differences between siblings within the scope of the present study, results clearly indicate that beyond the general similarities, there are differences between the parents' and the children's perception of IPC, especially between parents and younger siblings. And for the latter, it might not be important how "correctly" they understand their parents' conflict or if they possibly overestimate it, because their perception reflects the reality they are living in. This is interesting because it highlights the importance of paying attention to children as their reality might differ from adults' reality. Even though the parents were not asked for their estimation of their children's perception of IPC in the present study, it has previously been shown that parents overestimate their children's happiness, compared to the children's own rating (López-Pérez & Wilson, 2015). It is possible that parents underestimate their children's perception of high IPC or that they simply base their estimation of the children's perception of IPC on their own perception. Paying attention to the children's own appraisals of IPC would help to detect

children that are struggling more with IPC than parents might be aware of. It has previously been shown that for example involving children in the mandatory divorce/relationship dissolution mediation is something that both children and parents profit from (Strandbu et al., 2016; McIntosh et al., 2008).

4.4. Associations between parents' and children's perceptions of parental conflict resolution (RQ2.2)

Exploring associations between parents' and children's perceptions of the parents' ability to solve IPC (parental conflict resolution), results from correlation analyses (see Chapter 3.3.2) are consistent with previous research (Goeke-Morey et al., 2007, p. 751). Results show positive associations between all family members' perceptions of parental conflict resolution in general. These findings indicate that the family members' perception of parental conflict resolution is generally similar to each other in terms of any one family member's perception of better (or poorer) parental conflict resolution is connected to perceptions of better (or poorer) parental conflict resolution amongst the other family members. The family member's associations regarding parental conflict resolution are generally some weaker than their associations regarding IPC, but also more attune, in terms of less difference between the different family member's correlations. This indicates in a way that even though agreements are slightly lower, the family's overall agreement on parental conflict resolution is more unified amongst family members than for IPC. This could possibly be explained by characteristics of IPC and parental conflict resolution as constructs, such as IPC being a complex and compound construct, while parental conflict resolution is more concrete and less compound. Also, the parents' and children's measures are more similar for parental conflict resolution than for IPC, which might make it easier for parental conflict resolution and more difficult for IPC to yield overall family agreement.

Results show further that while parents and younger siblings have the strongest associations within their generation, older siblings don't differ much in their associations with their siblings and parents. This indicates that all family members except older siblings do experience parental conflict resolution more similar within the same generation, contrary to across generations. Further results from additional analyses of cross-generational correlations confirm that parents have a significant stronger association with the older sibling compared to their association with the younger sibling. Results also show that there are no tendencies of older children reporting generally better (or poorer) parental conflict resolution than younger children, ruling out age-

related reporting tendencies as an explanation for the differences between siblings. A possible explanation though could be that if older siblings are more exposed to IPC, they might also be more likely to witness parental conflict resolution than their younger siblings and are therefore closer to the parents' perception of parental conflict resolution. Another possible explanation could be that older siblings are more mature and could therefore interpret parental conflict resolution more "correctly" than their younger siblings, which again would make their perception of parental conflict resolution more similar to their parents' perception.

Additional results show that correlations between mothers and children (including siblings) did not significantly differ from correlations between fathers and children (including siblings). Thus, children (as well as siblings) have somewhat equal associations with both of their parents.

4.5 The relationship between perceptions of IPC and parental conflict resolution (RQ2.3)

Addressing the question how perceptions of IPC and parental conflict resolution are related to each other, results from correlation analyses (see Chapter 3.3.3) confirm the anticipated negative relationship between these two. Despite all differences in the parents' and children's perception of IPC and parental conflict resolution (see Chapter 4.3 and 4.4), the association between IPC and parental conflict resolution is strong, and equally strong for all family members. The relationship between IPC and parental conflict resolution is "negative", which means that better parental conflict resolution is associated with lower IPC and poorer parental conflict resolution is associated with higher IPC.

As these analyses are based on correlations, it is not possible to draw conclusions about whether lower levels of IPC causes better parental conflict resolution or the other way around, but previous research can support two main interpretations: On the one hand, it is possible that good conflict resolution skills lead to parents being able to handle, deescalate and solve IPC better than parents with poor conflict resolution skills (Gottman & Gottman, 2008, pp. 140-142). This again could possibly result in perceptions of lower IPC and more parental conflict resolution. It has on the other hand also been shown that more parental conflict resolution (e.g., parents making a compromise, asking for an apology or expressing positive emotions at the end of a destructive IPC) partially neutralizes negative effects that destructive IPC has on children and increases child happiness at the end of an IPC (Goeke-Morey et al., 2007, p. 749). Emotional security theory (Cummings, 1998; Davies & Cummings, 1994) provides a solid framework for explaining the children's association between IPC and parental conflict resolution. Because

parental conflict resolution increases both the child's and the family's well-being and positively changes the meaning of IPC, it will alter how children interpret and response to IPC (Goeke-Morey et al., 2007, p. 751).

Also, the further results show that there are some generational differences in the association between IPC and parental conflict resolution. While most children report good conflict resolution skills combined with medium to low IPC, parents show a different pattern in their reports. These indicate that while high IPC is clearly connected with poorer parental conflict resolution, and low IPC is clearly connected with better parental conflict resolution, there is a larger group of parents that is still in line with the general negative linear IPC-resolution association, but simultaneously experiences medium high IPC regardless of their conflict resolution skills. This could indicate that parents with high IPC er likely to have poor conflict resolution skills. Working on those to improve parental conflict strategies, lower IPC and diminish negative effects of IPC for children could be one possible therapeutic focus. Also, the association between IPC and parental conflict resolution might be more complex than assumed. It would be interesting to investigate this further by splitting parents into three groups based on reported IPC and comparing these groups more closely on conflict and parental conflict resolution patterns. Since this extends the scope of the present study, further research is needed.

4.6 Strengths and limitations

The present study has a number of strengths and limitations that deserve mentioning. The first strength is the rare combination of parent and child perspectives on conflict between parents and between each parent and the participating children. Hardly any studies have done this in the fields of IPC or parent-child conflict before. Relatedly, the unique multi-informant dataset in the present study allows for the application of SRM (RQ1), as well as the calculation of parent and child perceptions of IPC and parental conflict resolution (RQ2), both of which have never been done before that way. Therefore, the present study makes a unique contribution to the existing research in the field of family conflict and dynamics.

However, there are some limitations of the present study that also deserve mentioning. First, while family members from most of the participating families (81%) answered the survey within three months of each other, in other families this was longer (4-6 months = 10%, 7-12 months = 7%, > 12 months = 2%). These numbers, however, are solely based on the dates on which participants finished the survey. Therefore, no conclusions can be drawn about which parts of the survey have been answered when. Moreover, time spans between family members

finishing the survey can be due to delays in the reminding routines of the FamilieForSK study, which led to some parents finishing their survey close to half a year after starting it. Another possible explanation could be the general structure of the study which aimed for but did not claim family members to answer within a short time span from each other. That family members answered the survey at different times may be problematic, because conflict can change over time and it is possible that for some families, different family members referred to different stages of conflict. In these cases, conflict-measures would measure different conflicts and would thus be less reliable. At the same time, this might not be a severe problem, because the measures used in the present study already invite to a certain degree of inaccuracy, since only one measure (self-made strategies-frequency scale from the children's questionnaire) applies a time span to the questions. This leaves participants free to choose a time span when answering most of the measures, which implies that different family members can already choose different time spans.

Second, the measures used in the present study may have some slight limitations. Studies that use SRM or in other ways aim to compare the responses in a multi-informant approach specifically design their study so that parents and children answer exactly the same questions (with minor changes to make them more suitable to parents and children, respectively). In the present study, different measures were used to assess conflict between parents, and conflict between parent and child (RQ1), and further, the perception of IPC was assessed differently for parents and children (RQ2). While this is not ideal, the items that were included in the present study were carefully selected for being the most comparable conflict measures included in the FamilieForSK study. And thus, a high degree of trust in the results should apply. Having said that, the IPC-measures for younger and older siblings deviated somewhat from normality, which there is no theoretical or empirical explanation for. In a more comprehensive work than the present study, this could have been addressed by using log transformation or other transformation but was beyond the scope of this study. Therefore, the siblings' ratings of IPC must be interpreted with some caution.

5. Conclusion and implications

The present study is about conflict in families and how the perception of conflict varies between different family members. The aim of the present study was to explore family conflict dynamics by comparing different family members' perceptions of interparental conflict (IPC), parent-child conflict and parental conflict resolution, respectively. Two research questions were asked concerning similarities and differences on the individual, relational and family level of family conflict perception (RQ1) as well as associations between parent and child perceptions of IPC and parental conflict resolution (RQ2). These research questions were addressed using Social Relations Model (SRM) analyses (RQ1) and correlation analyses (RQ2), using a sample of 599 families drawn from the FamilieForSK study.

In accordance with previous research (Eichelsheim et al., 2009), the results from SRM analyses showed variations in conflict perceived between family members are rather due to characteristics of the perceiver of conflict and to characteristics of the specific relationship rated, than to characteristics of the family or to characteristics of the family member rated, respectively. In particular, three pattern of conflict perception were found. First, the way parents perceive conflict with each other is mainly influenced by characteristics of their relationship. This highlights the importance of the parental relationship for the parents' perception of IPC and the importance of making a distinction between interparental and parent-child relationship. Second, the way parents perceive conflict with their child is influenced especially by characteristics of the child, an effect which is rarely found in previous SRM studies on other topics (Eichelsheim et al., 2009). Third, the children's ratings of the parents are influenced especially by characteristics of children, highlighting the important role of child differences in the way children perceive conflict with their parents. Further, results showed that, while fathers experienced a lot (or little) conflict with other family members, these also experienced a lot of (or little) conflict with the fathers, a relation that was not found for mothers or children. Also, strong relationship-specific effects take place between parents, and between mothers and children, respectively, consolidating the importance of mutual, relationship-specific characteristics for conflict perception between parents and between mothers and children.

Consistent with previous research (Lucas-Thompson & George, 2017a, 2017b), results from the correlation analyses showed a positive association between parents' and children's perception of both IPC and parental conflict resolution, indicating a general agreement between family members on what is perceived as high (or low) IPC or as good (or poor) parental conflict

resolution. Results also showed that these associations were strongest within the same generation, and that parents' associations with older are stronger than with younger siblings. This indicates a certain degree of between-generation disagreement in the perception of both IPC and parental conflict resolution, possibly due to generational effects and sibling-differences such as older siblings being more exposed to IPC, while younger siblings are being more shielded from IPC. In line with concepts from emotional security theory (EST), further results showed that children associate lower (or higher) IPC with better (or poorer) parental conflict resolution. The parents' association between the perception of IPC and parental conflict resolution looked similar, but at the same time different, indicating that this association might be more complex for parents than it is for children and thus, more research is needed to be able to better understand it.

The present study makes an important contribution to research on family conflict dynamics, as it is the first study applying the SRM to the matter of family conflict and thereby enabling the simultaneous analysis of individual, relational and family-level shares of family conflict perception. Further, the present study's results contribute to an increased understanding of the association between parents' and children's perceptions of IPC and parental conflict resolutions, as it is one of the few studies on the field comparing parents' and children's reports.

As described in the introduction (see Chapter 1), my motivation for focusing on the topic of family conflict dynamics was to gain more insight into this topic as a future family therapist. Also, I wanted to carry out new research in this area that has implications for and can be used for family therapy. Indeed, the results of the present study have several implications for family therapists. First, the importance of relationship-specific characteristics for the parents' perception of IPC consolidates the value of focusing on a relationship rather than individual level when working with families or couples with IPC challenges. Second, as the results highlight the importance of child characteristics for both parent and child perceptions of parent-child conflict, a reasonable suggestion for therapists would be to acknowledge child characteristics, for example by adapting the therapeutic approach to these characteristics when working with families that struggle with parent-child conflict. Finally, the results highlight the importance of both similarities and differences between parents' and especially younger siblings' perception of IPC and parental conflict resolution. As children's appraisal might deviate from parents' appraisal, and because parents, as discussed in Chapter 4.3, might underestimate their children's appraisals of IPC, it might be especially important to pay attention to children's appraisals when working with families with IPC. This approach might

help to see hidden child appraisals of high IPC or poor parental conflict resolution and thus, enabling the therapist and/or parents to help the child and prevent or reduce children's possible negative reactions to IPC.

Based on the study's results, but bearing in mind the limitations as described earlier, recommendations for future research may be given. First, it would be great to see more studies using SRM analysis within the research domain of family conflict perception to replicate and extend findings of the present study. Future research should aim to apply identical (or nearly identical) measures to parents and children to assess conflict perceptions and could preferably be carried out with a four-member design, including perceptions of two parents and two siblings, to tap the full potential of SRM analysis. Second, it would be interesting to see investigations of parents' and children's perceptions of IPC and parental conflict resolution utilizing measures that allow for direct comparison of the absolute sizes of parent and child perceptions. Also, it would be interesting to see longitudinal research on how the family members' perception of IPC and parent-child conflict develop over time, which again could help better understand if and how family counselling contributes to increase the parents' conflict resolution skills as well as decrease IPC and parent-child conflict. Finally, even though the sample of the present study has shown to be a suitable sample for studying conflict in families, it would be desirable to include LGBT-families in future research to be able to better represent the existing population of families. Also, since the majority of families in the present study reported medium to low levels of IPC, it would be interesting to include more families that experience high(er) levels of IPC or parent-child conflict in future research in order to detect if different nuances apply for high(er) conflict.

References

Brooker, R. J., Neiderhiser, J. M., Leve, L. D., Shaw, D. S., Scaramella, L. V., & Reiss, D. (2015). Associations between infant negative affect and parent anxiety symptoms are bidirectional: Evidence from mothers and fathers. *Frontiers in Psychology,* (6), Article 1875. https://doi.org/10.3389/fpsyg.2015.01875

Bufdir (2017, October 18). *Family counselling.* https://bufdir.no/en/English_start_page/Family_counselling_services/Family_counselling/

Burt, S. A., Krueger, R. F., McGue, M., & Iacono, W. (2003). Parent-child conflict and the comorbidity among childhood externalizing disorders. *Archives of General Psychiatry, 60*(5), 505–513. https://doi.org/10.1001/archpsyc.60.5.505

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cox, M. J., & Paley, B. (2003). Understanding Families as Systems. *Current Directions in Psychological Science: A Journal of the American Psychological Society, 12*(5), 193–196. https://doi.org/10.1111/1467-8721.01259

Cox, M. J., Paley, B., & Harter, K. (2001). Interparental conflict and parent–child relationships. In J. H. Grych & F. D. Fincham (Eds.), *Interparental conflict and child development: Theory, research, and applications* (pp. 249–272). Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511527838.011

Cummings, E. M. (1998). Children exposed to marital conflict and violence: Conceptual and theoretical directions. In G. W. Holden, R. Geffner, & E. N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 55–93). American Psychological Association.

Cummings, E. M., Ballard, M., El-Sheikh, M., & Lake, M. (1991). Resolution and children's responses to interadult anger. *Developmental Psychology, 27*(3), 462–470. https://doi.org/10.1037/0012-1649.27.3.462

Cummings, E. M., Simpson, K. S., & Wilson, A. (1993). Children's responses to interadult anger as a function of information about resolution. *Developmental Psychology, 29*(6), 978-985. https://doi.org/10.1037/0012-1649.29.6.978

Cummings, E. M., & Wilson, A. (1999). Contexts of marital conflict and children's emotional security: Exploring the distinction bet ween constructive and destructive conflict from

the children's perspective. In M. Cox & J. Brooks-Gunn (Eds.), *Conflict and closeness in families: Causes and consequences* (pp. 105–129). Erlbaum.

Davies, P. T., & Cummings. E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin, 116*(3), 387-411. https://doi.org/10.1037/0033-2909.116.3.387

Davies, P. T., & Cummings. E. M. (1998). Exploring children's emotional security as a mediator of the link between marital relations and child adjustment. *Child Development, 69*(1), 124-139. https://doi.org/10.2307/1132075

Davies, P. T., Hentges, R. F., Coe, J. L., Martin, M. J., Sturge-Apple, M. L., & Cummings, E. M. (2016). The multiple faces of interparental conflict: Implications for cascades of children's insecurity and externalizing problems. *Journal of Abnormal Psychology, 125*(5), 664–678. https://doi.org/10.1037/abn0000170

Eichelsheim, V. (2011). *The complexity of families: Assessing family relationships and their association with externalizing problems* [Doctoral dissertation, Utrecht University]. ResearchGate. https://www.researchgate.net/publication/48327442_The_complexity_of_families_assessing_family_relationships_and_their_association_with_externalizing_problems

Eichelsheim, V. I., Buist, K. L., Deković, M., Cook, W. L., Manders, W., Branje, S. J. T., Frijns, T., Van Lier, P. A. C., Koot, H. M., & Meeus, W. H. J. (2011). Negativity in problematic and nonproblematic families: A multigroup social relations model analysis with structured means. *Journal of Family Psychology, 25*(1), 152–156. https://doi.org/10.1037/a0022450

Eichelsheim, V. I., Deković, M., Buist, K. L., Cook, W. L., & Johnson, D. (2009). The Social Relations Model in family studies: A systematic review. *Journal of Marriage and Family, 71*(4), 1052–1069. https://doi.org/10.1111/j.1741-3737.2009.00652.x

Eid, M., Gollwitzer, M., & Schmitt, M. (2017). *Statistik und Forschungsmethoden* [Statistics and research methods]. Beltz.

Elkins, I. J., McGue, M. & Iacono, W. G. (1997). Genetic and environmental influences on parent–son relationships: Evidence for increasing genetic influence during adolescence. *Developmental Psychology, 33*(2), 351–363. https://doi.org/10.1037/0012-1649.33.2.351

Engfer, A. (1988). The interrelatedness of marriage and the mother-child relationships. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 104–118). Clarendon.

Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*(1), 108–132. https://doi.org/10.1037/0033-2909.118.1.108

Fisher, R. A. (1925). *Statistical methods for research workers*. Oliver and Boyd.

Folkehelseinstituttet. (2021, April 30). *Om FamilieForSK-studien* [About the FamilieForSK study]. https://www.fhi.no/studier/familieforsk/hva-er-familieforsk

Frøyland, L. (2017). Systemisk samtale: Psykososialt samarbeid med barn, ungdom og foreldre [Systemic conversation: Psychosocial collaboration with children, youth and parents]. Fagbokforlaget.

Goeke-Morey, M. C., Cummings, E. M., & Papp, L. M. (2007). Children and marital conflict resolution: Implications for emotional security and adjustment. *Journal of Family Psychology, 21*(4), 744–753. https://doi.org/10.1037/0893-3200.21.4.744

Goodman, S. H., Barfoot, B., Frye, A. A., & Belli, A. M. (1999). Dimensions of marital conflict and children's social problem-solving skills. *Journal of Family Psychology, 13*(1), 33-45. https://doi.org/10.1037/0893-3200.13.1.33

Gottman, J. M., & Gottman, J. S. (2008). Gottman method couple therapy. In A. S. Gurman (Ed.), *Clinical handbook of couple therapy* (4th ed., pp 138–164). The Guilford Press.

Grych, J. H., Raynor, S. R., & Fosco, G. M. (2004). Family processes that shape the impact of interparental conflict on adolescents. *Development and Psychopathology, 16*(3), 649–65. https://doi.org/10.1017/S0954579404004717

Grych, J. H., Seid, M., & Fincham, F. D. (1992). Assessing marital conflict from the child's perspective: the children's perception of interparental conflict scale. *Child Development, 63*(3), 558-72. https://doi.org/10.1111/j.1467-8624.1992.tb01646.x

Halberstadt, A. G., Beale, K. S., Meade, A. W., Craig, A. B., & Parker, A. E. (2015). Anger in families: Individual and dyadic contributions. *Journal of Social and Personal Relationships, 32*(6), 810–828. https://doi.org/10.1177/0265407514552617

Helland, M., Holt, T., Gustavson, K., Larsen, L. & Røysamb, E. (2021). *Validation and short-form development of the CPS Strategy scales using Scandinavian samples* [Manuscript in preparation]. Division of Mental & Physical Health, Norwegian Institute of Public Health.

Holt, T., Helland, M. S., Gustavson, K., Cummings, E. M., Ha, A., & Røysamb, E. (2020). Assessing children's responses to interparental conflict: Validation and short scale development of SIS and CPIC-properties scales. *Journal of Abnormal Child Psychology, 48*(2), 177–196. https://doi.org/10.1007/s10802-019-00586-7

Holt, T., Helland, M. S., Morbech, M., Larsen, L., Gustavson, K., Ha, A., & Cummings, E. M. (2021). Agreement between child and parent reports of children's reactions to interparental conflict. *Journal of Family Psychology*. Advance online publication. http://dx.doi.org/10.1037/fam0000861

Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*(1). 53–60. https://arrow.tudublin.ie/libart/4/

Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Johnsen, A., & Torsteinsson, V. W. (2012). *Lærebok i familieterapi* [Textbook in family therapy]. Universitetsforlaget.

Kashy, D. A., & Kenny, D. A. (1990). Analysis of family research designs: A model of interdependence. *Communication Research, 17*(4), 462–482. https://doi.org/10.1177/009365090017004004

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis.* The Guilford Press.

Kenny, D. A., & La Voie, L. (1984). The Social Relations Model. *Advances in Experimental Social Psychology,* (18), 141–182. https://doi.org/10.1016/S0065-2601(08)60144-6

Kerig, P. K. (1996). Assessing the links between interparental conflict and child adjustment: The conflicts and problem-solving scales. *Journal of Family Psychology, 10*(4), p. 454–473. https://doi.org/10.1037/0893-3200.10.4.4544

Kim, H.-Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics, 38*(1), 52–54. https://doi.org/10.5395/rde.2013.38.1.52

Larsen, L., Helland, M. S. & Holt, T. (2021). *Development and Validation of a Short Form of the Conflict Resolution Scale from CPS* [Manuscript submitted for publication]. Division of Mental & Physical Health, Norwegian Institute of Public Health.

Lenhard, W., & Lenhard, A. (2014). *Psychometrica online calculator: Hypothesis Tests for Comparing Correlations* [Freeware]. https://www.psychometrica.de/correlation.html

López-Pérez, B., & Wilson, E. L. (2015). Parent-child discrepancies in the assessment of children's and adolescents' happiness. *Journal of Experimental Child Psychology,* (139), 249–255. https://doi.org/10.1016/j.jecp.2015.06.006

Lucas-Thompson, R. G., & George, M. W. (2017a). Are there individual and sibling differences in appraisals of interparental conflict? *Journal of Family Psychology, 31*(7), 933-938. http://dx.doi.org/10.1037/fam0000326

Lucas-Thompson, R. G., & George, M. W. (2017b). Do marital conflict behaviors in response to a novel stressor uniquely predict adolescent outcomes? *Journal of Child and Family Studies, 26*, 2505–2518. https://doi.org/10.1007/s10826-017-0753-1

McAdams, T. A., Rijsdijk, F. V., Neiderhiser, J. M., Narusyte, J., Shaw, D. S., Natsuaki, M. N., Spotts, E. L., Ganiban, J. M., Reiss, L. D., Lichtenstein, P., & Eley, T. C. (2015). The relationship between parental depressive symptoms and offspring psychopathology: Evidence from a children-of-twins study and an adoption study. *Psychological Medicine, 45*(12), 2583–2594. https://dx.doi.org/10.1017/S0033291715000501

McIntosh, J. E., Wells, Y. D., Smyth, B. M., & Long, C. M. (2008). Child focused and child-inclusive divorce mediation: Comparative outcomes from a prospective study of postseparation adjustment. *Family Court Review, 46*(1), 105–124. https://doi.org/10.1111/j.1744-1617.2007.00186.x

Minuchin, S. (1974). *Families and family therapy*. Harward University Press.

Navarro, D. J. (2015). *Learning statistics with R: A tutorial for psychology students and other beginners* (Version 0.5). University of Adelaide. http://ua.edu.au/ccs/teaching/lsr

NESH. (2019, June 8). *Guidelines for Research Ethics in the Social Sciences, Humanities, Law and Theology.* https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-in-the-social-sciences-humanities-law-and-theology/

Revelle, W. (2020). P*sych: Procedures for psychological, psychometric, and personality research* (Version 2.0.12). Northwestern University. https://CRAN.R-project.org/package=psych

Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36. https://www.jstatsoft.org/v48/i02/

Schönbrodt, F. D., Stas, L., & Loeys, T. (2014). *fSRM: An R package for Social Relations Models with roles (Version 0.6.4).* https://cran.r-project.org/package=fSRM

Schrodt, P., & Afifi, T. D. (2018). A social relations model of negative relational disclosures and closeness in families. *Journal of Social and Personal Relationships, 35*(2), 180–201. https://doi.org/10.1177/0265407516680304

Shoham, V., Rohrbraugh, M. J., & Cleary, A. A. (2008). Brief strategic couple therapy. In A. S. Gurman (Ed.), *Clinical handbook of couple therapy* (4th ed., pp 299–322). The Guilford Press.

Silverman, W. K., Kurtines, W. M., Jaccard, J., & Pina, A. A. (2009). Directionality of change in youth anxiety treatment involving parents: An initial examination. *Journal of Consulting and Clinical Psychology, 77*(3), 474–485. https://doi.org/10.1037/a0015761

Simon, M. G. (2008). Structural couple therapy. In A. S. Gurman (Ed.), *Clinical handbook of couple therapy* (4th ed., pp 323–349). The Guilford Press.

Stas, L., Schönbrodt, F., & Loeys, T. (2015). Getting the most out of family data with the R package fSRM. *Journal of Family Psychology, 29*(2), 263–275. https://doi.org/10.1037/fam0000058

Statistics Norway. (2021a). *Total fertility rate, women (C) 1968-2019).* Retrieved January 20, 2021 from https://www.ssb.no/en/statbank/table/04232/

Statistics Norway. (2021b). *Total fertility rate, men 2000-2019.* Retrieved January 20, 2021 from https://www.ssb.no/en/statbank/table/07871/

Statistics Norway. (2021c). *The population of Norway, by immigration category in three generations, contents and year.* Retrieved January 20, 2021 from https://www.ssb.no/en/statbank/table/12548/

Strandbu, A., Thørnblad, T., & Handegård, B. H. (2016). Involvering av barn i foreldremekling: Barns erfaringer fra meklinger ved varierende konfliktnivå og problembelastning [Involving children in mandatory divorce/relationship dissolution mediation: Children's experiences with mediation at varying levels of conflict and problem burden]. *Tidsskrift for familierett, arverett og barnevernrettslige spørsmål, 14*, 360–385. https://doi.org/10.18261/issn.0809-9553-2016-04-04

Tagliabue, S., & Lanz, M. (2009). Perceived emotional support in family triads: Generation and gender differences. *TPM, 16*(2), 95–106.

Torsteinsson, V. W. (2019). Familieterapiens historie [History of family therapy]. In L. Lorås & O. Ness (Eds.), *Håndbok i familieterapi* [Handbook in family therapy] (pp. 25–39). Fagbokforlaget.

Yockey, R. D. (2018). *SPSS demystified: A simple guide and reference.* Routledge.

van Eldik, W. M., de Haan, A. D., Parry, L. Q., Davies, P. T., Luijk, M. P. C. M., Arends, L. R., & Prinzie, P. (2020). The interparental relationship: Meta-analytic associations

with children's maladjustment and responses to interparental conflict. *Psychological Bulletin, 146*(7), 553–594. https://doi.org/10.1037/bul0000233

von Bertalanffy, L. (1968). *General System Theory: Foundations, development, applications.* George Braziller.

Warmuth, K. A., Cummings, E. M., & Davies, P. T. (2020). Constructive and destructive interparental conflict, problematic parenting practices, and children's symptoms of psychopathology. *Journal of Family Psychology, 34*(3), 301-311. http://dx.doi.org/10.1037/fam0000599

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues and applications* (pp. 56–75) Sage.

Yan, N., Ansari, A., & Peng, P. (2021). Reconsidering the relation between parental functioning and child externalizing behaviors: A meta-analysis on child-driven effects. *Journal of Family Psychology, 35*(2), 225-235. http://dx.doi.org/10.1037/fam0000805

Zemp, M., Bodenmann, G., & Cummings, E. M. (2016). The significance of Interparental conflict for children rationale for couple-focused programs in family therapy. *European Psychologist, 21*(2), 99–108. https://doi.org/10.1027/1016-9040/a000245

Zhang, Z., Ilies, R., & Arvey, R. D. (2009). Beyond genetic explanations for leadership: The moderating role of the social environment. *Organizational Behavior and Human Decision Processes, 110*(2), 118-128. https://doi.org/10.1016/j.obhdp.2009.06.004

Appendix

Appendix A: Applied measures

Table A.1

Parents' questionnaire: Conflict Strategy Short Form from the Conflict and Problem Solving Scale (CPS)

Subscale	*What strategies do you and the other parent use when you have disagreements with each other?*	Never	Rarely	Some-times	Often	NA
Child-involvement	Me: Argue in front of the child/children					
	My partner: Argue in front of the child/children					
	Me: Involve the child/children in our argument					
	My partner: Involve the child/children in our argument					
	Me: Argue when the child/children might be able to overhear					
	My partner: Argue when the child/children might be able to overhear					
Cooperation	Me: Listen to the other's point of view					
	My partner: Listen to the other's point of view					
	Me: Try to understand what the other is really feeling					
	My partner: Try to understand what the other is really feeling					
	Me: Try to find a solution that meets both of our needs equally					
	My partner: Try to find a solution that meets both of our needs equally					
Physical aggression	Me: Throw something at the other partner					
	My partner: Throw something at the other partner					
	Me: Throw objects, slam doors, break things					
	My partner: Throw objects, slam doors, break things					
	Me: Push, pull, shove, grab partner					
	My partner: Push, pull, shove, grab partner					
Stalemating	Me: Complain, bicker without really getting anywhere					
	My partner: Complain, bicker without really getting anywhere					
	Me: Threaten to end relationship					
	My partner: Threaten to end relationship					
	Me: Withdraw love or affection					
	My partner: Withdraw love or affection					
Verbal aggression	Me: Make accusations					
	My partner: Make accusations					
	Me: Name-calling, cursing, insulting					
	My partner: Name-calling, cursing, insulting					
	Me: Say or do something to hurt the other's feelings					
	My partner: Say or do something to hurt the other's feelings					

Note. Reported with permission.

Table A.2

Children's questionnaire: Intensity scale from the Children's Perception of Interparental Conflict Scale (CPIC)

We would like to know what it's like for you when your parents are arguing or having a fight. In the questions we are mainly using the word arguing, but we also thinking about the times your parents are sad or angry because they disagree, without arguing loudly.	False	Somewhat true	Quite true	Completely true
My parents get really mad when they argue				
When my parents have an argument, they say mean things to each other				
When my parents have an argument, they yell a lot				
My parents hardly ever yell when they have a disagreement				
My parents have broken or thrown things during an argument				
My parents have pushed or shoved each other during an argument				

Note. Reported with permission.

Table A.3

Children's questionnaire: Self-made Strategies-frequency scale

During the past year have you experienced that your parents have ...	Never	Once or a few times	Often	All the time
Disagreed on many things?				
Argued or had loud discussions?				
Argued or had discussions with a low voice?				
Seemed angry, annoyed or sad when talking to each other?				
Seemed angry, annoyed or sad when they were taking about each other?				
Not wanted to talk to each other because they were enemies?				

Note. Reported with permission.

Table A.4

Parents' questionnaire: Conflict scale from the Parental Environment Questionnaire (PEQ)

	Definitely false	Probably false	Probably true	Definitely true
I often criticize my child				
Often there are misunderstandings between my child and myself				
I often hurt my child's feelings				
My child and I often get into argument				
My child often makes me angry or annoyed				
I often lose my temper with my child				

Note. Reported with permission.

Table A.5

Children's questionnaire: Conflict scale from the Parental Environment Questionnaire (PEQ)

Regarding parent		Definitely false	Probably false	Probably true	Definitely true
Mother	My mother often criticizes me, for example, saying that I'm not good enough or that I'm doing something wrong				
	My mother and I often argue				
	My mother is very often angry at me				
	I often get angry at my mother [a]				
Father	My father often criticizes me, for example, saying that I'm not good enough or that I'm doing something wrong				
	My father and I often argue				
	My father is very often angry at me				
	I often get angry at my father [a]				

Note. Reported with permission.

[a] This item is not originally part of the PEQ. It is constructed by the FamilieForSK project.

Table A.6

Parents' questionnaire: Resolution scale from the Conflict and Problem Solving Scale (CPS)

For each statement, please circle the rating that best describes the outcomes of your disagreement	Never	Rarely	Sometimes	Often
We feel we have resolved it, or come to an understanding				
We don't resolve the issue; we continue to hold grudges				
We end up feeling angry and annoyed with one another				
We stay mad at one another for a long time				

Note. Reported with permission.

Table A.7

Children's questionnaire: Resolution scale from the Norwegian Short Scale of the CPIC-Properties scales

We would like to know what it's like for you when your parents are arguing or having a fight. In the questions we are mainly using the word arguing, but we also thinking about the times your parents are sad or angry because they disagree, without arguing loudly.	False	Somewhat true	Quite true	Completely true
When my parents have an argument, they usually work it out				
Even after my parents stop arguing they stay mad at each other				
When my parents disagree about something, they usually come up with a solution				
When my parents argue they usually make up right away				
My parents still act mean after they have had an argument				

Note. Reported with permission.

Appendix B: Internal consistency

Table B.1

Internal consistency reliabilities for all measures involved in the present study

Measure (scale)	Reporting family member	Cronbach's α
Interparental conflict (CPS)	Mother	.90
	Father	.90
Parent-child conflict (PEQ)	Mother	.86
	Father	.88
	Child on mother	.78
	Child on father	.82
Interparental conflict (CPIC)	Child	.85
	Younger sibling	.82
	Older sibling	.86
Parental conflict resolution (CPS)	Mother	.87
	Father	.86
Parental conflict resolution (CPIC)	Child	.78
	Younger sibling	.74
	Older sibling	.82

Appendix C: Outliers

Figure C.1

Boxplots of all scales with outliers
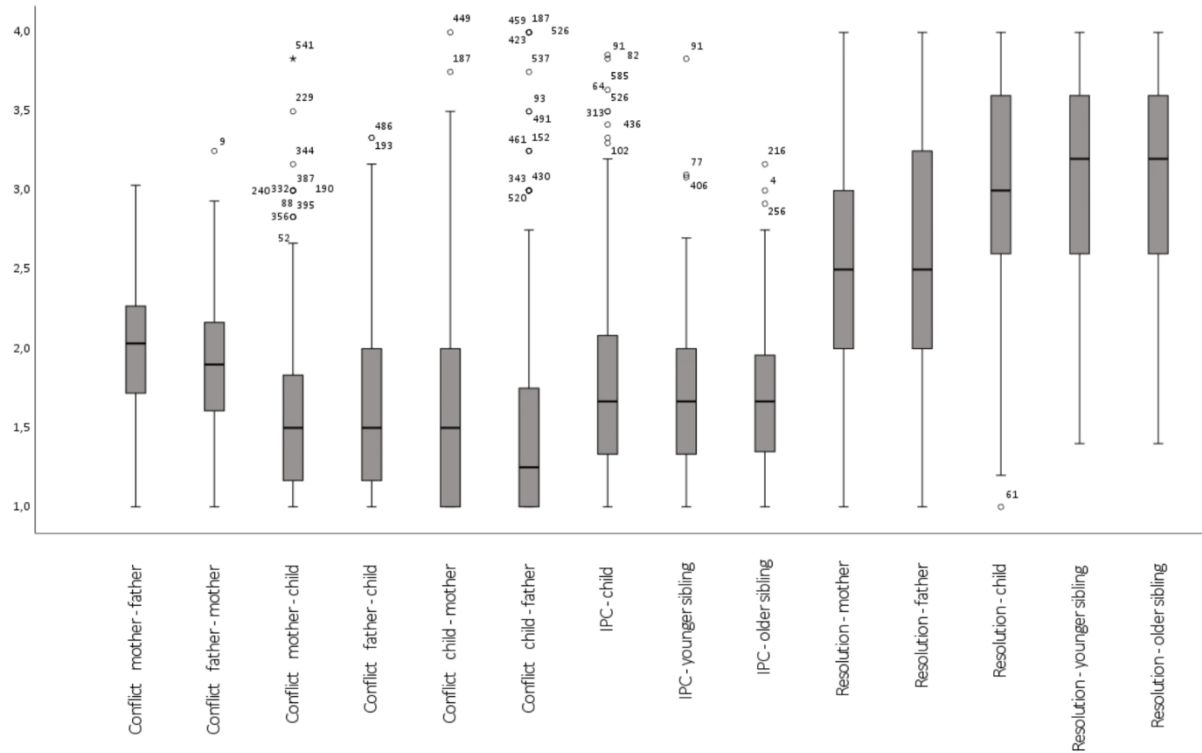
Note. Outliers are displayed as circles, extreme outliers as stars, both with case numbers next to them.

Appendix D: Pairwise comparisons between correlation coefficients

Table D.1

Pairwise comparison between correlation coefficients r12 and r13 for IPC (RQ2.1)

1	2	3	Correlations			N	Test statistic z	p
			r12	r13	r23			
M	YS	OS	.21*	.51**	.48**	109	-3.358	0
F	YS	OS	.16	.33**	.45**	97	-1.641	.05
C	M	F	.30**	.24**	.55**	274	1.091	.138
YS	M	F	.22*	.18	.60**	94	.437	.331
OS	M	F	.40**	.32**	.63**	95	.971	.166

Note. M = mother; F = father; C = child; YS = younger sibling; OS = older sibling.

Table D.2

Pairwise comparison between correlation coefficients r12 and r13 for resolution (RQ2.2)

1	2	3	Correlations			N	Test statistic z	p
			r12	r13	r23			
M	YS	OS	.07	.40**	.38**	110	-3.221	.001
F	YS	OS	.11	.36**	.36**	97	-2.04	.013
C	M	F	.17**	.18**	.43**	271	-.156	.438
YS	M	F	.17	.21*	.46**	93	-.374	.354
OS	M	F	.37**	.35**	.47**	94	.203	.42

Note. M = mother; F = father; C = child; YS = younger sibling; OS = older sibling.

Appendix E: Scatterplots of siblings' perception of IPC/resolution in relation to age

Figure E.1
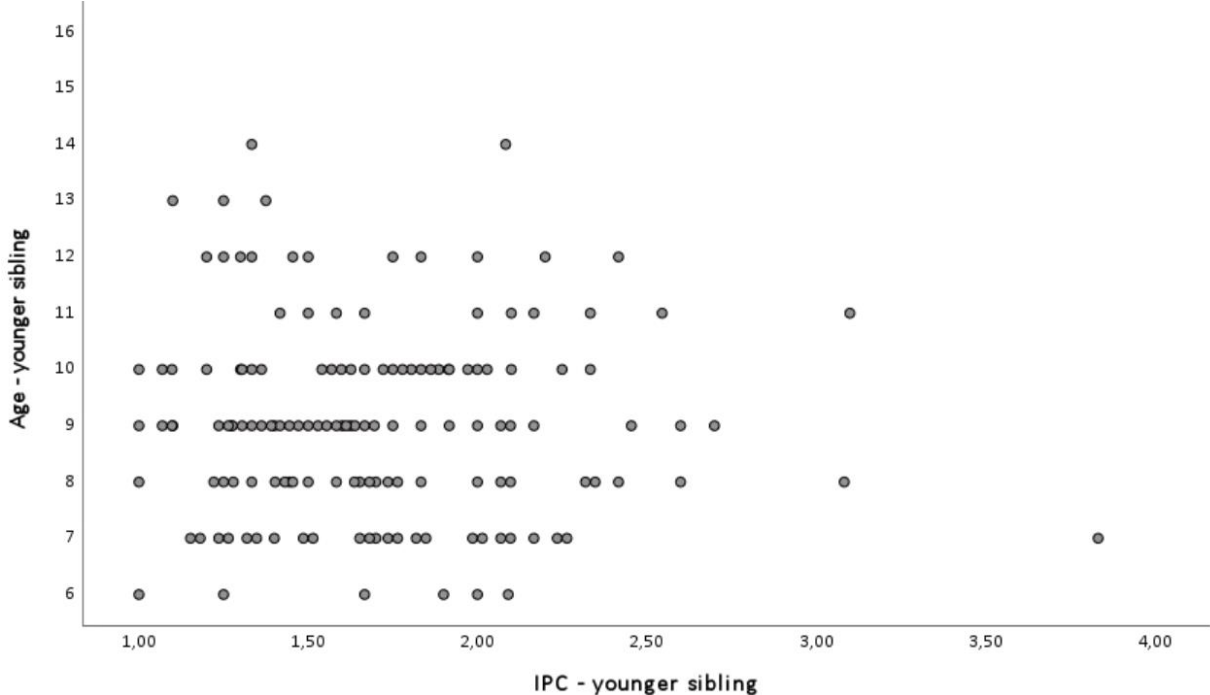*Scatterplot of younger siblings' perception of IPC in relation to their age (RQ2.1)*

Figure E.2
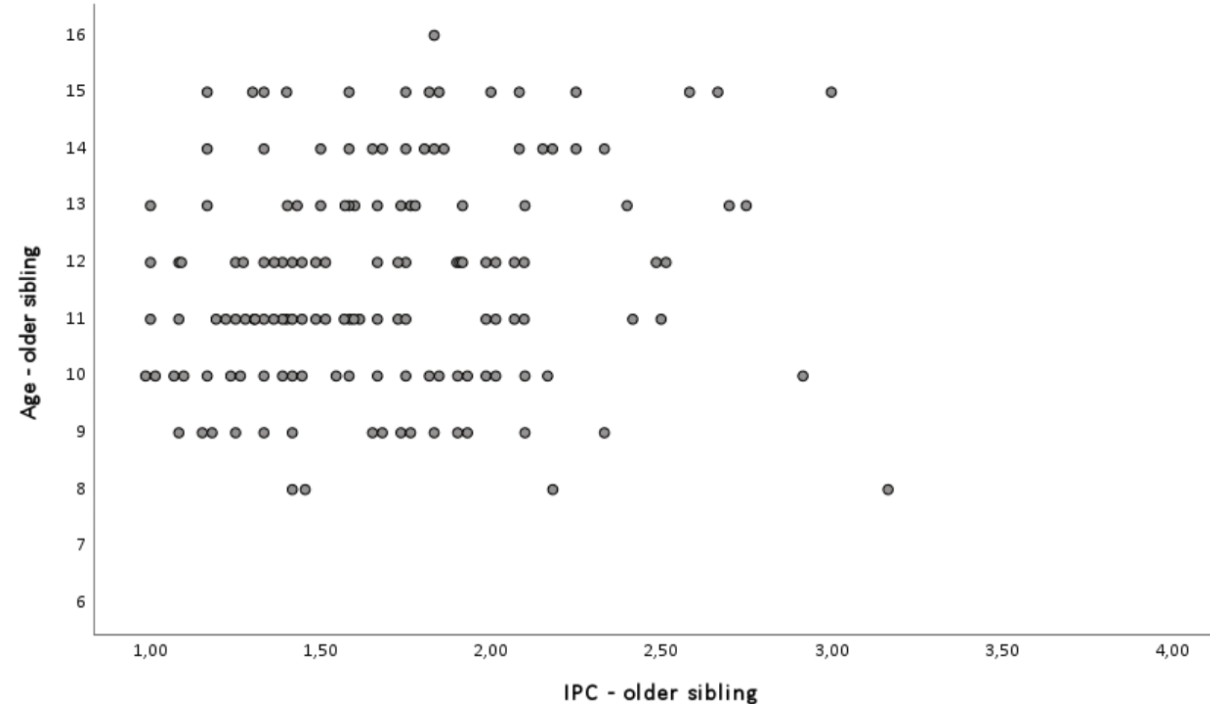*Scatterplot of older siblings' perception of IPC in relation to their age (RQ2.1)*

Figure E.3
Scatterplot of younger siblings' perception of parental conflict resolution in relation to their age (RQ2.2)
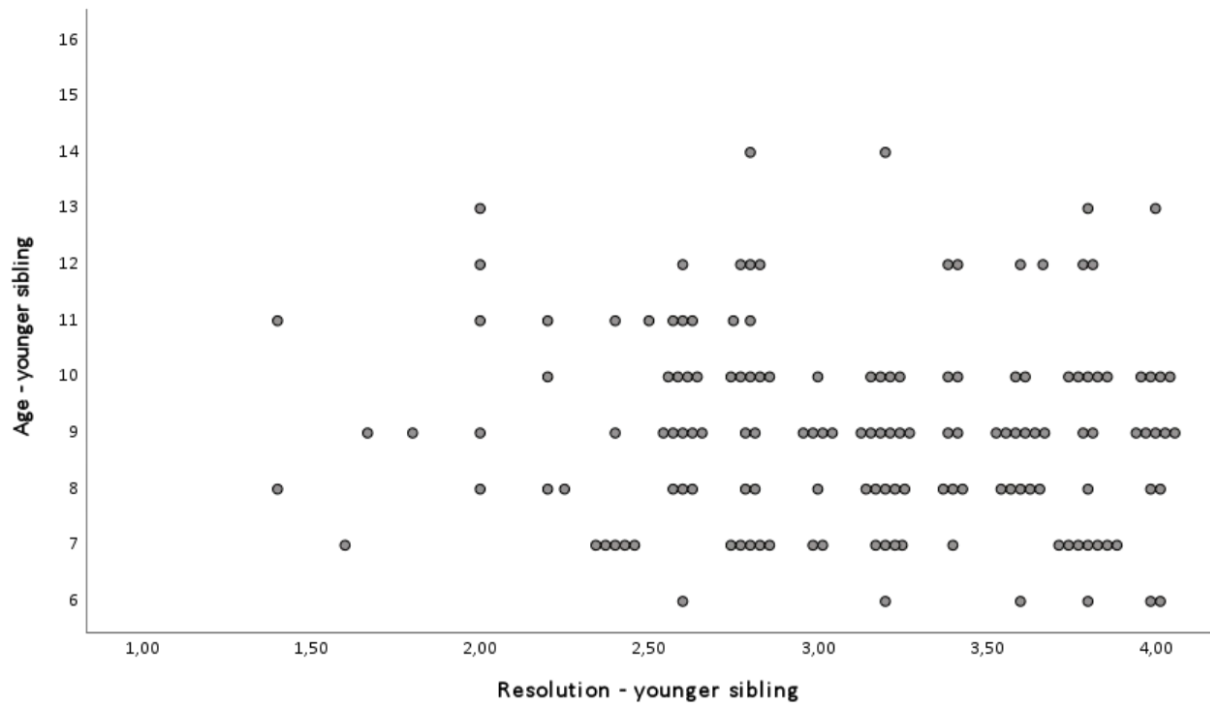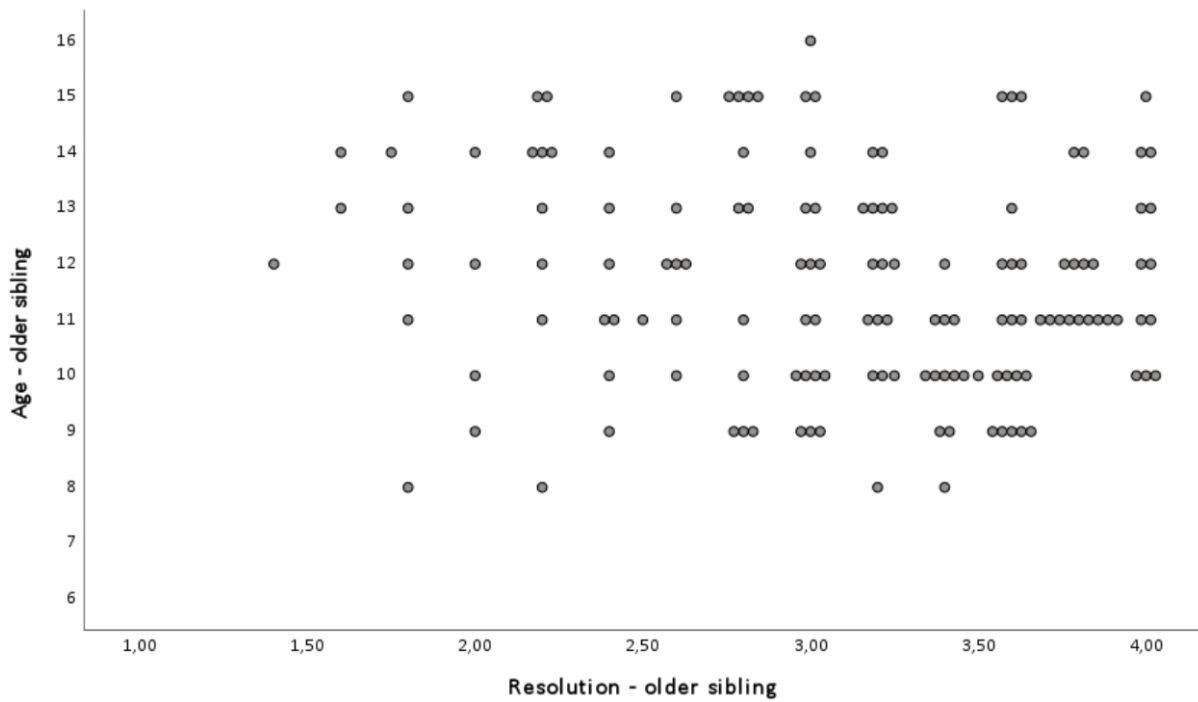

Figure E.4
Scatterplot of older siblings' perception of parental conflict resolution in relation to their age (RQ2.2)

Appendix F: Scatterplot of mothers' perception of IPC by parental conflict resolution

Figure F.1

Scatterplot of mothers' perceptions of IPC and parental conflict resolution (RQ2.3)