

# Interparental Conflict and Children's Internalising and Externalising Problems in a Norwegian Sample

Maria Morbech



Master Thesis, Department of Psychology

UNIVERSITY OF OSLO

June 2017



# **Interparental Conflict and Children's Internalising and Externalising Problems in a Norwegian Sample**

Copyright Forfatter

2017

Interparental Conflict and Children's Internalising and Externalising Problems in a  
Norwegian Sample

Maria Morbech

<http://www.duo.uio.no>

Trykk: Reprosentralen, Universitetet i Oslo





# Abstract

**Forfatter:** Maria Morbech

**Tittel:** Interparental Conflict and Children's Internalising and Externalising Problems in a Norwegian Sample

**Veiledere:** Annika Melinder (supervisor) og Maren Helland (co-supervisor)

**Background:** The notion that interparental conflict is related to child maladjustment in form of internalising and externalising difficulties is well established in the literature. The measure of interparental conflict has often relied on marital satisfaction, and research based on sufficient measures of the dimensions of conflict is lacking. The literature on the effects of interparental conflict on children in Norway is scarce. The purpose of this study was to investigate the relationship between interparental conflict and children's internalising and externalising problems in a Norwegian sample.

**Methods:** The sample consisted of 364 families (mothers, fathers and child). Data collection method was self-report questionnaire. Parents answered questions that are meant to assess dimensions of interparental conflict that affect children. Children's psychosocial functioning was measured by parents' reports and children's self-reports.

**Results:** The main finding was that level of interparental conflict could predict children's internalising and externalising problems. It was further found that the effect of interparental conflict on children's externalising problems was moderated by gender; conflict was a stronger predictor of externalising problems for boys than for girls.

**Conclusion:** These results were in line with previous research. That interparental conflict also seems to affect children in low-conflict families should be noted, and is important in a preventative perspective. The present findings can lead to a more nuanced understanding of how interparental conflict affects children in Norway.





## **Author's note**

First and foremost, I would like to thank my supervisor, Annika Melinder (Department of Psychology, University of Oslo), for all good help along the way. A big thank you to Maren Sand Helland and Tonje Holt at the Norwegian Institute of Public Health – thank you for taking such good care of us students, while we were working on the master theses. And a special thanks to Maren for the help across the finish line, which has been invaluable. You have given me good and concrete advice, and a lot of encouraging support. I would also like to thank Pål Ulleberg for all the hours he spent helping us with the factor analysis, which at one point looked completely unsolvable. To Malin and Elisabeth – Thank you for letting me mix blood, sweat and tears with you for this past year. It has been a wonderful mix.

Oslo, June 2017

Maria Morbech



# Contents

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	<b>The Family Systems Theory .....</b>	<b>2</b>
1.1.1	The spillover effect .....	2
1.1.2	Intensification of symptoms in child difficulties .....	3
1.2	<b>Defining interparental conflict.....</b>	<b>4</b>
1.3	<b>Interparental conflict and child adjustment.....</b>	<b>5</b>
1.3.1	Externalising problems.....	6
1.3.2	Internalising problems.....	7
1.3.3	Gender differences in effect of interparental conflict .....	8
1.3.4	Comorbidity of internalising and externalising problems.....	9
1.4	<b>Multi-informant assessment of internalising and externalising problems.....</b>	<b>10</b>
1.4.1	Informant agreement in families in different life situations.....	11
1.5	<b>Research aims and hypotheses in the present thesis .....</b>	<b>12</b>
<b>2</b>	<b>Methods.....</b>	<b>14</b>
2.1	<b>Participants.....</b>	<b>14</b>
2.2	<b>Measures .....</b>	<b>15</b>
2.3	<b>Ethics .....</b>	<b>17</b>
2.4	<b>Statistical analyses.....</b>	<b>18</b>
2.4.1	Indexes .....	18
2.4.2	Factor analyses .....	19
2.4.3	Gender differences in SDQ .....	21
2.4.4	Bivariate linear regression analyses .....	21
2.4.5	Moderation analyses.....	21
<b>3</b>	<b>Results .....</b>	<b>22</b>
3.1	<b>Preliminary analyses.....</b>	<b>22</b>
3.1.1	Descriptive statistics and psychometric properties for CPS .....	22
3.1.2	Descriptive statistics and psychometric properties of SDQ .....	23
3.2	<b>Bivariate correlation analysis of the study variables .....</b>	<b>24</b>
3.3	<b>Factor analysis.....</b>	<b>27</b>
3.4	<b>Level of interparental conflict can predict children’s internalising and externalising problems.....</b>	<b>27</b>
3.5	<b>Gender moderates the relationship between interparental conflict and children’s internalising and externalising problems.....</b>	<b>28</b>
3.6	<b>Level of interparental conflict can predict the discrepancies between children’s and parents’ report of the child’s internalising and externalising problems.....</b>	<b>31</b>
<b>4</b>	<b>Discussion .....</b>	<b>33</b>
4.1	<b>Level of interparental conflict can predict children’s internalising and externalising problems.....</b>	<b>33</b>
4.2	<b>Gender as a moderator between interparental conflict and children’s internalising and externalising problems.....</b>	<b>36</b>
4.2.1	Gender differences in children’s internalising and externalising problems.....	36
4.2.2	Interparental conflict predicts internalising and externalising problems differently for boys and girls .....	37
4.2.3	Gender as a moderator in the relationship between interparental conflict and children’s externalising problems .....	38

<b>4.3</b>	<b>Level of interparental conflict could not predict the discrepancies between parents' and children's report of the child's internalising and externalising problems.....</b>	<b>39</b>
<b>4.4</b>	<b>From research to practice .....</b>	<b>40</b>
4.4.1	Preventing interparental conflicts .....	40
4.4.2	Kindergarten and school as preventive actors.....	40
4.4.3	Sensitivity in the interaction between personnel and children.....	41
4.4.4	Need for expanded gender role understanding.....	42
4.4.5	Important communicators .....	43
<b>4.5</b>	<b>Limitations .....</b>	<b>43</b>
4.5.1	CPS as measurement of interparental conflict .....	43
4.5.2	Method of data collection.....	45
4.5.3	The present sample.....	46
<b>4.6</b>	<b>Future directions .....</b>	<b>47</b>
<b>4.7</b>	<b>Conclusion.....</b>	<b>48</b>
<b>References</b>	<b>.....</b>	<b>50</b>
	<b>Appendix A: Full list of CPS, conflict strategies .....</b>	<b>64</b>
	<b>Appendix B: Internal consistencies, factor loadings, and correlations for CPS, short scale ...</b>	<b>66</b>
	<b>Appendix C: Descriptive statistics for CPS, short scale .....</b>	<b>68</b>
<b>Table 1</b>	<b>.....</b>	<b>22</b>
<b>Table 2</b>	<b>.....</b>	<b>24</b>
<b>Table 3</b>	<b>.....</b>	<b>26</b>
<b>Table 4</b>	<b>.....</b>	<b>27</b>
<b>Table 5</b>	<b>.....</b>	<b>28</b>
<b>Table 6</b>	<b>.....</b>	<b>29</b>
<b>Table 7</b>	<b>.....</b>	<b>30</b>
<b>Table 8</b>	<b>.....</b>	<b>30</b>
<b>Figure 1</b>	<b>.....</b>	<b>31</b>
<b>Table 9</b>	<b>.....</b>	<b>32</b>





# 1 Introduction

The notion that the parents' relationship is pivotal to children's psychosocial well-being has been a cornerstone of the literature in family psychology throughout the past several decades (Zemp, Bodenmann, & Cummings, 2016). In accordance with the rising divorce rate over the past years, there has been a considerable increase in the interest for what parental split-up might entail for the children involved. A majority of the available research on the area is from North-America, and a vast body of empirical work confirms that children with divorced parents experience more adjustment problems than children with continuously married parents (e.g., Paul R. Amato, 2000, 2001, 2010; Paul R. Amato & Keith, 1991; Breivik & Olweus, 2006; Emery, 1999; Kelly, 2000; Størksen, Røysamb, Holmen, & Tambs, 2006; Wallerstein, Lewis, & Blakeslee, 2000). There are some contradictory findings however, showing how some children are doing better after their parents separate (e.g., Moxnes, Haugen, & Holter, 1999; Öberg & Öberg, 1987). In accordance with this, the traditional belief of divorce as a major predictor of children's maladjustment is exceeded by a more recent, complex understanding; interparental conflict may be more significant to children's well-being than the actual parental split-up (Lansford, 2009; Zemp et al., 2016). Drawing on this literature, research on the area of interparental conflict and child adjustment is crucial, both in families of divorce and in families where the parents live together.

Although there is a persuasive body of research establishing the link between interparental conflict and child adjustment, there exist little to no research on the area from Norway. Scandinavian culture differs from cultures in the rest of Europe and the United States in many ways. Norway is a tax-financed welfare state with an extensive public health system, and a society aspiring to gender equality. Results from samples from other countries may therefore not be applicable to the Norwegian population, and thus, interparental conflict and child adjustment deserves more research attention in Scandinavian countries. In Norway, all parents with a child under the age of 16 who are going through separation is obliged to meet for mandatory mediation (Rød, 2010). The Norwegian mediation system offers unique opportunities in identifying critical or vulnerable families marked by frequent or severe conflicts, and offer help and guidance. Nevertheless, for families where the parents live together, it is more challenging to identify vulnerable groups.

Efforts to understand the association between marital distress and child development increasingly have focused on how parents express and manage conflicts in their relationship.

One issue in previous research has been the merely uniform conceptualisation of marital quality in terms of relationship satisfaction. Although this approach has generated important findings, the unidimensional measure of marital distress has failed to identify the different dimensions of marital conflict that are associated with or predictive of child maladjustment. Therefore, it is important to generate more research based on a measure of different dimensions of interparental conflict, rather than relying on a single measure of relationship satisfaction. This would gain a more nuanced understanding of these conflicts. In order to be able to identify vulnerable groups, offer help and provide preventative measures at an early stage it is crucial to initiate more research in the area.

## **1.1 The Family Systems Theory**

The Family Systems Theory (FST) encompasses a number of models that share a core set of principles regarding family interaction (see Bowen, 1993; Cox & Paley, 1997; Minuchin, 1985). This theory suggests that children's development is intrinsically related to interactions among other actors within the family. Thereby, there is an indirect effect of parental processes on children, with a premise that interparental conflict alters aspects of parenting and/or the parent-child relationship (Bradford & Barber, 2005). In accordance with this, some scholars argue that interparental conflict is so emotionally draining to parents that it affects children indirectly by altering parenting practises, such as parents' ability to recognise and respond to their children's need, as well as the quality of parent-child relationship (Erel & Burman, 1995; Fauber, Forehand, Thomas, & Wierson, 1990). Furthermore, lack of availability and attentiveness from parents makes the emergence of mental problems and antisocial behaviour in children more likely (Sroufe, 1988).

### **1.1.1 The spillover effect**

A theoretical perspective proposed by the FST is that conflict between parents may generate spillover: the idea that affect and behaviour generated in one relational setting transfer to other relationships (Engfer, 1988). Hence, interparental conflict might shape ineffective parenting and ultimately children's development. More specifically, parents who are angry, exhausted, or demoralised by marital conflict may be less emotionally available or attuned to their children (Katz & Gottman, 1996). What makes the spillover effect unique is that children do not need to be exposed directly to the conflicts. They do not even need to be aware that there are any conflicts between their parents in order to be affected by it (Harold,



Aitken, & Shelton, 2007). Although parents may try to shield their child from any hostile interaction they engage in, by transferring the negative affect from the interparental relationship into the parent-child relation, the child may still be indirectly affected. The spillover effect of interparental conflict to parenting are of interest as it might help explain the increased risk of mental and behavioural problems in children such as internalising and externalising difficulties, considering the linkage between parenting and child adjustment.

### **1.1.2 Intensification of symptoms in child difficulties**

Another theoretical perspective proposed by the FST is that interparental conflicts might be accompanied by an intensification of any dimension in the parent-child relationship. Intensification of the parent-child relationship may result in triangulation (Minuchin, 1974). Triangulation refers to the pattern of family interaction in which one or both parents attempt to include the child in their dysfunctional dyad. This may be an attempt to either recruit the child into a coalition against the other partner, or to provide a detour from their own distress (Grych, Raynor, & Fosco, 2004).

Another form of intensification may be that the child intensifies problematic behaviours in an attempt to reunite otherwise disengaged parents. Intensification may also occur in that the parents intensify the child's problematic behaviour; in an attempt to distract themselves from their marital problems, they rather focus on their child and any symptoms the child might have (Margolin, Oliver, & Medina, 2001). Vogel and Bell (1960) conceptualise this as the "family scapegoat". They describe a process by which families create a "problem child" and then utilises him or her as a scapegoat. The scapegoat is often a product of stressful or destructive family dynamics. The distress is typically between the parents, and is often chronic in the way that the conflicts are unresolved and poorly managed. By creating a family scapegoat, parents are able to divert their attention away from their own marital problems, and they form a united focus on the scapegoat, agreeing that the child is, or has, a problem. In light of the concept of the "scapegoat" as a family divergent, it is possible that parents magnify the child's problems in order to create an opportunity for agreement. Whether parents report more than children on the child's difficulties will be examined in the present study.

## 1.2 Defining interparental conflict

Conflict and disagreement can often occur in relationships, particularly among couples (Anderson, Anderson, Palmer, Mutchler, & Baker, 2010; Gottman & Silver, 1999). The term “couple conflict” has different meanings. These meanings, and the assumptions related to them, play a significant role in shaping conclusions about couple conflict (Knoester & Afifi, 2001). Ekeland (2004) described central conditions for conflict, which has been comprised of different definitions: “when differences between people who depend on each other is experienced as incompatible and threatening in regard of their own needs and interests, and when it causes tensions and feelings because one of the parties feels like the other utilises power to influence the situation to their advantage” (pp.86).

Despite the widespread use of the term “high-conflict”, and the increasing focus on high-conflict families, the term has not been precisely defined or operationalised by social scientists (Anderson et al., 2010; Birnbaum & Bala, 2010). Cummings and Davies (1994) used the term “high conflict” to refer to couples when the timing, duration, and intensity of their conflict results in negative effects for the relationship, individual partners, or other family members, most notably children (Anderson et al., 2010). Furthermore, high-level conflict has been defined as having a “chronic quality” and a “high degree of emotional reactivity, blaming and vilification” (Weeks & Treat, 2001). The extant professional literature does not offer a consensus as to precisely what occurs within these high-conflict relationships nor what differentiates couples who engage in regular conflict from those who engage in high-conflict (Anderson et al., 2010). There has been a tendency to define high-conflict by applying a subjective standard that locates high-conflict somewhere between low or “normal” conflict and domestic violence (e.g., Weeks & Treat, 2001). Anderson et al. (2010) discuss conflict as occurring along a continuum in order to establish the scope of the term. This way, high-conflict couple interactions can be distinguished from those that characterise less severe couple conflict to domestic violence and partner abuse. Furthermore, it has been suggested that interparental conflict can be described along five different dimensions: Frequency, expression and intensity, content, duration, and to what extent the conflicts are resolved (Borren & Helland, 2013). These different dimensions may offer a more nuanced measure of high-conflict.

### 1.3 Interparental conflict and child adjustment

The more interparental conflicts disrupt family functioning, the more likely it is that children will perceive them as distressing, and a child in distress is more likely to develop adjustment problems (Grych & Fincham, 1990). When children were asked to identify events that were stressful or made them “feel bad, nervous, or worried”, they reported that observing interparental conflict was a significant stressor (Lewis, Siegel, & Lewis, 1984). Moreover, observational studies show that children typically exhibit distress when exposed to angry or aggressive interactions involving their parents (e.g., Cummings, Zahn-Waxler, & Radke-Yarrow, 1981). Moreover, children do not habituate to chronic conflict; it seems on the contrary like their negative reactions become progressively amplified by repeated conflict exposure (Davies, Myers, Cummings, & Heindel, 1999; De Bellis, 2001; Goeke-Morey, Cummings, Harold, & Shelton, 2013). This in turn leads to interference in psychological functioning, which may enhance the risk of adjustment problems (Zemp et al., 2016). Children at all stages of development may be negatively affected by interparental conflict; children of different ages seem to exhibit some type of negative reactivity to conflict between parents, from toddlerhood through adolescence (Heinrichs, Cronrath, Degon, & Snyder, 2010).

Children living in homes marked by frequent, hostile, and poorly resolved conflicts exhibit elevated levels of emotional and behavioural problems (Buehler et al., 1997; Cummings & Davies, 2010; Grych & Fincham, 1990; Zemp et al., 2016). More specifically, it is suggested that marital conflict affects children’s socioemotional development by shaping their cognitions and perceptions (Davies & Cummings, 1998; Grych & Fincham, 1990), emotional self-regulation (Gottman & Katz, 1989), disrupting children’s emotional security (Davies, Harold, Goeke-Morey, & Cummings, 2002), and their particular coping responses (Jenkins, Smith, & Graham, 1989). Moreover, effect sizes seem to vary depending on the aspect of the conflicts. The effect size for overt conflict, such as direct expressions of hostile behaviour and affect was larger ( $r = .35$ ) than for covert conflict ( $r = .28$ ) where hostility is expressed indirectly, such as using passive-aggressive techniques. Moreover, conflict frequency produced an even smaller effect size ( $r = .19$ ) (Buehler et al., 1997). This indicates that the way conflicts are expressed and handled by parents, rather than whether they occur, is critical for understanding their impact on children (Grych & Fincham, 2001).

In an attempt to explain how conflict and child adjustment are associated, Buehler and Gerard (2002) found a positive link between interparental conflict and a more extensive use

of severe discipline by parents, which resulted in less parental involvement in their children's lives. These results may be seen in light of the spillover hypothesis. The spillover effect of interparental conflict on to parenting is further supported by Krishnakumar and Buehler's (2000) meta-analytic review of 39 studies (including 138 effect sizes), examining the association between interparental conflict and parenting. They found that parents' preoccupation with their own conflicts impaired most dimensions of their child-rearing practices, with an average effect size of  $r = .62$ . Critically, effect sizes found in longitudinal studies were almost as high as those calculated from cross-sectional data. Thus, factors such as disruption in parenting behaviour appear to work as a mechanism by which interparental conflict is linked to child adjustment. More recent studies demonstrate that changes in interparental problems and changes in adolescent development are linked over time (Cui, Conger, & Lorenz, 2005)

Interparental conflict may have different impact on children in different cultural contexts. Whereas some studies have suggested that ethnic minorities are less vulnerable to conflict, other studies show no such differences (McLoyd, Harper, & Copeland, 2001). There are also findings suggesting that interparental conflict affects children and youth of minorities more than the control group (Chung, Flook, & Fuligni, 2009). It is therefore important to study the effects of interparental conflict on children from different cultures. As mentioned, the majority of research on the area is conducted in the U.S. Norway differs from the U.S. in many ways, perhaps especially regarding welfare systems. However, studies on divorce and child adjustment from Nordic countries show similar findings as has been found in North-American samples (Breidablikk & Meland, 1999; Breivik & Olweus, 2006; Hansagi, Brandt, & Andreasson, 2000; Nævdal & Thuen, 2004; Størksen et al., 2006). Whether research from Norway on interparental conflict and child adjustment in families where the parents live together yields similar results as is found in studies from the U.S., should therefore be investigated.

### **1.3.1 Externalising problems**

Externalising problem behaviour is an important broad-band indicator of maladjustment, and as such, a salient child mental health outcome (Achenbach & Edelbrock, 1987). Externalising problems typically include aggression, hyperactivity, conduct problems, delinquency, and substance abuse (Buehler et al., 1997). Emery (1982) noted that most of the early investigations of marital discord and child adjustment focused on externalising problems

(e.g., aggression, deviant behaviour), and significant associations were found in both clinic samples (Emery & O'Leary, 1982; Oltmanns, Broderick, & O'Leary, 1977; Porter & O'Leary, 1980) and nonclinic samples (Rutter, 1971; Whitehead, 1979). Similar associations were reported by Cummings and Davies (1994) between interparental conflict and children's externalising problems, assessing a link between high levels of conflict and children's aggression and delinquency. In their literary review, Grych and Fincham (1990) reported an association between marital conflict and externalising problems such as conduct disorder (Johnson & O'Leary, 1987; Jouriles, Murphy, & O'Leary, 1989; Wierson, Forehand, & McCombs, 1988), aggression (Jacobson, 1978; Johnston, Gonzalez, & Campbell, 1987), and delinquency/antisocial behaviour (Emery & O'Leary, 1984; Peterson & Zill, 1986). Succeeding work has continued to support this association between interparental conflict and children's externalising problems (Buehler et al., 1998; Davies, Hops, Aipert, & Sheeber, 1998). Whether this link is also present in Norwegian families where the parents still live together, will be explored in the present thesis.

### **1.3.2 Internalising problems**

Internalising behaviour is another broad-band indicator of child maladjustment, and typically includes depression, withdrawal, anxiety, somatic complaints, and low self-esteem (Buehler et al., 1997). Studies investigating the link between interparental conflict and children's internalising problems have found more mixed results than studies on externalising problems. Some previous studies have found no significant association between interparental conflict and children's internalising problems, such as anxiety in clinic samples (Emery & O'Leary, 1982; Oltmanns et al., 1977), or neurotic problems in nonclinic samples (Rutter, 1971; Wolkind & Rutter, 1973). However, there is also a persuasive body of research demonstrating significant associations between interparental conflict and internalising problems such as anxiety in clinic samples (Porter & O'Leary, 1980), and neurotic problems in nonclinic samples (Whitehead, 1979). In the literature reviewed by Grych and Fincham (1990), several studies found a link between interparental conflict and internalising problems, such as depression (Johnston et al., 1987; Peterson & Zill, 1986), and anxiety/withdrawal (e.g., Long, Slater, Forehand, & Fauber, 1988; Wierson et al., 1988). More recent research seems to further support the association between interparental conflict and children's internalising problems (Kelly, 2000). Although there are some conflicting findings, the notion that interparental conflict is related to children's internalising problems is fairly well

established. The association does however appear to be less robust compared with the association between interparental conflict and externalising problems (Cummings & Davies, 1994; Emery, 1982). For an example, Buehler et al. (1997) found less effect of interparental conflict on youth internalising problems than for externalising problems. Further support for this pattern was reported by Breivik and Olweus (2006) who typically found the highest effect sizes for variables measuring academic and externalising problems. This difference was somewhat less marked for the boys in their sample. Davies and Cummings (1994) suggested that internalising difficulties are intrinsic, relatively subtle behaviours and may be underreported. This might especially be true for studies that only rely on parent report. Contradicting these results however, Davies and Cummings (1998) found that interparental conflict predicted internalising symptoms equally as well as externalising problems. The present study will base the measure of children's difficulties on children's own report, which will be a strength over many previous studies.

### **1.3.3 Gender differences in effect of interparental conflict**

It is unresolved whether child gender plays a role in the effect of interparental conflict on children's adjustment. In the relatively small set of studies in which gender has been examined as a focal variable in the link between interparental conflict and child adjustment, the overall pattern of results has produced inconsistent and even contradictory results (Davies & Lindsay, 2001). Two models have commonly been proposed to explain gender as a moderator in the link between interparental conflict and child adjustment. The male vulnerability model suggests that boys are more susceptible to the deleterious effects of interparental conflict than girls. The differential reactivity model on the other hand, posits that all children are affected by conflict but whereas boys tend to respond by manifesting adjustment problems in the realm of externalising problems, girls tend to respond with internalising difficulties (Davies & Lindsay, 2001). Reviewing the literature, especially earlier research has offered support to the male vulnerability model (Block, Block, & Morrison, 1981; Kerig, 1996, 1998). Davies and Lindsay (2001) note that some of the empirical support may however have been the result of a methodological artefact. Hence, the tendency in previous research to find stronger effects of interparental conflict on boys may have been due to the fact that this research was mainly investigating externalising problems, which boys are more likely to exhibit than girls. Girls on the other hand, are more likely to respond with internalised emotions (Zahn-Waxler, 1993). Consequently, research may have

been biased towards detecting boys' problem behaviour more than in girls. Compared to the male vulnerability model, the differentiate reactivity model has not provided the same level of support (Kerig, 1998). To further complicate the understanding of gender differences in the effect of interparental conflict, some studies have suggested that conflict may be a stronger predictor of maladjustment in girls than for boys (Cummings & Davies, 1994; Unger, Brown, Tressell, & McLeod, 2000). In accordance with this, Størksen et al. (2006) found that girls to a larger extent reported enduring symptoms of anxiety and depression in association with parental divorce than did boys. It does indeed seem difficult to draw any simple conclusions regarding the role of gender (Davies & Lindsay, 2001). Lastly, meta-analytic studies have generally not found gender to be a significant moderator of the direct effect of interparental conflict on children (Buehler et al., 1997; Kitzmann, Gaylord, Holt, & Kenny, 2003; McDonald & Grych, 2006). It seems that empirical tests of the moderating effects of gender have lagged behind in the research on the link between interparental conflict and child adjustment. The failure to detect a consistent relationship between conflict, child adjustment and gender may be, as mentioned, part due to the focus on externalising behaviour. Furthermore, informants' difficulties to detect internalising symptoms in children may also be a factor. Studies relying on adult's reports may oversee the severity of more covert behavioural symptoms in children, and thereby miss the variance in the internalising problems. This thesis will attempt to further build on this research by investigate whether gender moderates the relationship between interparental conflict and children's internalising and externalising problems. Based on the high aspirations of gender equality in Norway, one might expect other patterns of gender differences in the present sample.

#### **1.3.4 Comorbidity of internalising and externalising problems**

The high prevalence of comorbidity of internalising and externalising problems is a critical point. Research shows that internalising and externalising difficulties often occur together. Polier, Vloet, Herpertz-Dahlmann, Laurens, and Hodgins (2012) found that of children and adolescents with conduct disorder in a general population sample, 35% showed comorbid internalising psychopathology. In a clinical sample, the prevalence was even higher, with 78% of children and youth with externalising problems also struggled with internalising difficulties. The link between internalising and externalising problems is critical, considering the affect these difficulties has on children's cognitive and psychosocial development, school

achievement, peer relations, and general well-being (Ingoldsby, Kohl, McMahon, & Lengua, 2006; Kim-Cohen et al., 2005; Polier et al., 2012).

The prevalence of all children and youth in Norway who has a diagnosable mental illness is as high as 8%. At all times, about 15-20% of children and youth will struggle with mental health problems, experiencing symptoms to such an extent that it affects their school achievement, daily chores, interaction with others, and general well-being. For many however, the symptoms will be temporarily, and every third 16-year-old will fulfil the criteria for a psychiatric diagnosis at some point during their childhood years (Mykletun, Knudsen, & Mathiesen, 2009). Growing up, children and youth are exposed to a whole string of possible risk factors for developing mental health problems such as internalising and externalising problems. Mental illness can to some degree be prevented by attempting to reduce or completely remove chronic or acute risk factors. Following the evidence presented above, high level of interparental conflict is a major predictor of children's maladjustment, and may cause children to develop mental and behavioural difficulties such as internalising and externalising problems. Therefore, it is crucial to extend on the scarce research already existing from Norway on interparental conflict and how it affects children adjustment.

## **1.4 Multi-informant assessment of internalising and externalising problems**

The most prevalent strategy for assessing contextual variations in mental health is the multi-informant assessment approach (Kraemer et al., 2003). However, only low to moderate agreement between informants has been found (Achenbach, McConaughy, & Howell, 1987; Duke, Ireland, & Borowsky, 2005; Edelbrock, Costello, Dulcan, Conover, & Kala, 1986; Verhulst & van der Ende, 1992). Different informants, such as mothers, fathers, children, teachers, and peers, have been found to differ in the information they provide for child and adolescent assessments (Achenbach et al., 1987). In their meta-analysis, Achenbach et al. (1987) investigated how teachers, parents, clinical observers, and children reported about the child's behaviour and symptomatology. Their study produced an average correlation between parents' and teachers' report measured by Pearson's  $r$ , of .28, and an average correlation between child and adult report of .22. Some studies have found higher correlations between informants however, with coefficients between  $r = .30$  and  $r = .60$  (Collishaw, Goodman, Ford, Rabe-Hesketh, & Pickles, 2009).



Greater levels of correspondence have been found for informants' ratings of child externalising problems than of child internalising problems (Achenbach et al., 1987). This finding is often interpreted as suggesting that informant agreement is better for problems that are more observable (externalising) compared with problems that are less observable to informants (internalising). Generally, there tend to be less discrepancy between adult informants than between adult informants and children's self report (Achenbach et al., 1987; Sargisson, Stanley, & Hayward, 2016). A more recent meta-analytic study by Reyes and Kazdin (2005) concluded that most studies only find weak to moderate correlations between different informants. Moreover, gender does not seem to affect the discrepancy between informants (Achenbach et al., 1987; Reyes & Kazdin, 2005). Reyes and Kazdin (2005) concluded their study by emphasising the importance of examining factors that account for and contribute to informant discrepancies.

#### **1.4.1 Informant agreement in families in different life situations**

Although the general finding show discrepancies between informants, some have suggested that parents are the most important source of information for children's emotional and behavioural problems (Achenbach et al., 1987; Kadzin, 1988). Parents who are emotionally impaired however, might show bias in their reports. For an example, there is evidence supporting the view that depressed and/or anxious mothers may exaggerate the behaviour problems manifested in their children (Najman, Williams, Nikles, & Shuttlewood, 2001; Najman et al., 2000). Najman et al. (2001) examined whether mothers who were experiencing a mental illness differed from other mothers when describing their child's emotional state or behavioural problems. In their study, they compared mother's reports with the reports of her child, for mothers with different levels of mental health impairment. They suggest that depressed mothers may have a "cognitive bias" which distorts their judgements about the behaviour and emotions or feelings experienced by their child. Their results showed a relationship between the level of mental health impairment in the mother and the increasing sensitivity but decreasing specificity of her report of her youth's behaviour when compared to the youth's own reports (Najman et al., 2001). This evidence suggests that currently impaired parents may over-report the rate of child difficulties that their children manifest. An alternative interpretation is that non-impaired parents may under-report the rate of difficulties experienced by their children. In an attempt to explain their results, the authors propose the possibility that depressed mothers are more sensitive to their child's problems and are likely

to offer reports that are more accurate. In turn, this might indicate that unimpaired mothers ignore their children's difficulties, or are simply more tolerant. By interpreting the results the other way around however, it might be that depressed mothers are overly concerned and sensitive to their child, whereas unimpaired mothers may give a more accurate report of their child's difficulties. (Najman et al., 2001)

Thus, there seem to occur a distortion of judgements in mothers' observation of their children's problems. It is however difficult to find research that specifically addresses parent-child discrepancies across family circumstances. It is reasonable to think that ongoing conflicts between partners will affect both their own mental health and how sensitive they are as parents. Empirical work is lacking to substantiate this. However, the FST offers two different suggestions for how conflict might influence discrepancies between parents and children. FTS suggest that interparental conflict is so emotionally draining to parents that it affects children indirectly by altering parenting practises, such as parents' ability to recognise and respond to their children's need (Erel & Burman, 1995; Fauber et al., 1990). Consequently, they might oversee behavioural and emotional difficulties that the child might have. Based on this, one may assume that in high-conflict families, parents are likely to report fewer problems than the child is. However, based on the concept of the "scapegoat", it is feasible to expect opposite results. The theory of the scapegoat proposes that parents distract themselves from their marital problems by rather focusing on their child and any symptoms that the child might exhibit (Margolin et al., 2001). By attempting to create an opportunity for agreement between each other, parents might magnify the child's problems, and exaggerate the severity of any difficulties the child might have. Relying on this it may be conceivable that parents in high-conflict families do in fact report more difficulties than the child does. Little research has addressed this topic, and the knowledge about factors influencing discrepancies is lacking. This study will attempt to contribute knowledge in this area.

## **1.5 Research aims and hypotheses in the present thesis**

The overall aim of this thesis is to investigate the link between interparental conflict and how it affects children in families where the parents still live together in a Norwegian sample. More precisely, it is hypothesised that the level of interparental conflict can predict children's internalising and externalising problems in this sample. Based on previous research, there are inconclusive findings on whether the effect differs for girls and boys. Therefore, the

moderating effect of gender on the relationship between interparental conflict and children's internalising and externalising problems will be investigated. Lastly, the hypothesis that level of interparental conflict can predict the discrepancies between parents' and children's reports of the child's internalising and externalising problems will be explored. It will further be discussed whether it is the theory of spillover or the scapegoat that adds best explanation value to the present findings.

## 2 Methods

The present thesis made use of data from the research project “FamilieForSK” (Families in Norway). FamilieForSK has the objective to increase knowledge about the consequences of interparental conflicts for children and parents in Norway. The project consists of two subprojects; a pilot study and a main project. The main project, “Dynamics of Family Conflicts” will gather data from families who meet for counselling at Family Counselling Services due to family issues or separation. The main project is financed by The Research Council of Norway (NFR). The present thesis used data from the pilot study, which is financed by The Norwegian Directorate for Children, Youth and Family Affairs (Bufdir) and The Research Council of Norway (NFR). FamilieForSK is carried out at the Norwegian Institute of Public Health.

### 2.1 Participants

For the current project, FamilieForSK invited 2500 families to participate. The families were randomly selected from the MoBa sample pool, with the criteria that both mother and father participated, that they had joint address and that the target child turned 11 years old during 2015. An invitation and a joint consent form were sent by mail to the families, and both parents had to consent to participation for them and their child. By returning the signed consent forms the family triad received one questionnaire for each family member. The project was interested in complete triads and therefore only families where all three family members consented to participate received questionnaires. Children received an information letter written specifically for the age group. It was clearly stated that it was voluntary for the child to participate. The participants were requested to fill out their forms independently and were provided with separate stamped envelopes in which to return the forms. The response rate of complete triads was 15% (n=364). There was some incongruence in statistics for mothers and fathers due to missing responses on some variables. There were 191 girls and 165 boys participating in the study, eight did not report their gender. In this sample, 89.6% of mothers and 87.6% of fathers reported that they were married. This is slightly higher than on national basis: In 2014 married couples constituted 73 % of all couples in Norway (Hægeland, 2015). The high percentage of married couples in this sample was expected, and mirrored the recruitment demands (e.g., only cohabiting parents with an 11-year-old child were invited). The mean number of children was 2.70 for women and 2.78 for men,

indicating that men have more children with other partners compared to women in this sample. Recent statistics show that the average number of children per household is 1.74, meaning that the parents in the present sample has one more child on average than the general Norwegian population (Falnes-Dalheim & Dybendal, 2016).

In the present sample, 82.4% of women and 65.4% of men were highly educated (undergraduate degree or higher), notably higher than the average on national basis (35.6% for women and 28.7% for men) (Holøien, Zachrisen, & Holseter, 2016). Moreover, 76.9% of the fathers reported a gross income above 500.000 NOK, whereas only 43.1% of the mothers reported the same. In comparison, estimated annual salary for all employees in Norway constituted 518.100 NOK in 2015 (Lunde & Bye, 2016).

## 2.2 Measures

Data was collected through questionnaires with several different scales covering a wide range of psychosocial areas. In this thesis however, only measures of interparental conflict and children's psychosocial difficulties have been used.

*Conflict and Problem Solving Scales (CPS)* (Kerig, 1996) is a self-report questionnaire consisting of 82 questions. The CPS is designed to measure four dimensions of couple conflict (e.g., frequency, severity, resolution, and efficacy), as well as a variety of conflict strategies (i.e. cooperation, avoidance, stonewalling, verbal aggression, physical aggression, and child involvement). Only measures of frequency and conflict strategies will be used in this thesis.

Frequency is noted by participant's rating of the number of times they engage in major or minor conflicts during one year on a 6-point ordinal scale ranging from "once a year or less" (scored 1 for minor conflicts and 2 for major conflicts) to "just about every day" (scored 6 for minor conflicts and 12 for major conflicts). Couples are also asked to rate a variety of conflict strategies using a list of 45 tactics (for full list, see appendix A). They are asked to separately rate the frequency with which they and their partners have used each strategy in the previous year on a 4-point scale ranging from 1 (*never*) to 4 (*often*). Reliability (internal consistency measured by Cronbach's alpha,  $\alpha$ ) estimates from the original, American sample were acceptable to good for both genders, ranging from .70 to .87 for the six conflict strategy subscales. Test-retest correlations measured by Pearson's  $r$  show varying

results, ranging from a low  $r=.53$  for child involvement to a high of  $r=.87$  for severity, with the median correlation reported at  $r=.63$ .

CPS was implemented in Norway for the first time for the FamilieForSK project. It was translated from English to Norwegian and back-translation was utilised in coherence with standing scientific standards, in order to make sure that the wording of the original items and the Norwegian translation was consistent in meaning and content. In the present study, participants were measured on conflict dimensions of conflict strategies and frequency of minor and major conflicts. The conflict strategies subscale cooperation was reversed. Thus, a high score reflected lack of cooperation between parents.

*Strengths and Difficulties Questionnaire (SDQ)* (Goodman, 1997) was used to measure the child's internalising and externalising problems. SDQ is a 25-item instrument designed to measure child and adolescent psychological symptoms in child and adolescent mental health areas. It was developed from the well-established British Rutter scales (Rutter, 1967). The SDQ has 5 subscales relating to Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems and Prosocial Behaviour; The first four adding up to the Total Difficulties Score. All answers are scored on a 3-point Likert scale ranging from 0 (*not true*) to 2 (*completely true*). The SDQ self-report version was used in the questionnaire for the children and SDQ parent report was used in the questionnaire for the parents. SDQ demonstrate good psychometric properties: it is highly correlated with the child behaviour checklist (Achenbach, 1991) (e.g.,  $r=.76$  for total difficulties; (Smedje, Broman, Hetta, & von Knorring, 1999) and has been found to demonstrate test–retest correlations of  $r=.85$  for the total difficulties scale. The Norwegian version of SDQ has been used extensively and is well validated (Heyerdahl, 2003; Stone, Otten, Engels, Vermulst, & Janssens, 2010).

In the present study, the emotional and peer subscales were combined to measure children's internalising problems, and the behavioural and hyperactivity subscales were combined to measure children's externalising problems. This has been advised in low risk or general population samples (Goodman, Lamping, & Ploubidis, 2010). Reversed items were recoded. Thus, a high score on the two subscales reflected more difficulties. Inter-item consistency as measured by Cronbach's alpha in the present study sample varied between informants, but was overall acceptable ranging from .59 to .63 for internalising problems and .71 to .72 for externalising problems (see Table 2 for all values).

## 2.3 Ethics

Ethical considerations in research are critical. In respect to the topic in the present thesis, perhaps the initial consideration includes the positive aspects of increasing knowledge about family dynamics and interparental conflicts in Norway. However, it is a sensitive topic, and by encouraging parents to systematically evaluate their own and their partner's ways of communication, conflict behaviours and ability to resolve conflicts, this might provoke higher and more severe levels of conflict. On the other hand, the questions might bring awareness to the parents about their communication patterns and conflict styles, making them more conscious about how they interact with each other.

Bearing in mind these ethical implications, sensitive topics such as the present one will inevitably introduce some ethical dilemmas; however, the data is of great value for research and is necessary in order to gain more knowledge and competence on the area. Appreciating the vulnerability of children, FamilieForSK has been especially sensitive to the children participating in the study; all participating children were informed about where to enquire in case of anxiety or difficulties linked to the theme in the questionnaires. Contact information to the project manager was also provided to the children, encouraging them to get in contact if they had any questions about the survey. Considering the ethics regarding children as informants, interviews rather than questionnaires would perhaps be a more appropriate method for data collection.

The present thesis is based on questionnaire reports given under informed consent. As this sample is from the MoBa study, the families have been given an identification number, which all subsequent data is linked to. In this way, the appropriate identification number, making the data file anonymous, substituted all personal information. The research was approved by the appropriate Regional Medical Research Ethics Committee (REK), with reference number 2015/1373.

As emphasised, the knowledge in Norway is sparse in the area of parental cohabitation, interparental conflicts and how high levels of conflict between parents may affect children. However, international research shows clear associations between high levels of interparental conflict and children's maladaptation, making it a topic of considerable importance. To be able to identify vulnerable groups and provide preventative measures at an early stage, it is crucial to initiate more research in the area. Thus, the current research will contribute to the human situations under investigation.

## 2.4 Statistical analyses

Descriptive statistics and Cronbach's alpha ( $\alpha$ ) were calculated using SPSS version 24. SPSS was also used to perform principal axis factoring and bivariate correlation analysis.

Confirmatory factor analysis (CFA) was applied to test the fit of the model using Mplus version 7.1.1. Measurement invariance across groups of the best-fitting factor structures was tested using Multigroup Confirmatory Factor Analysis (MG-CFA) in Mplus. The study's hypotheses of predictions were tested with bivariate linear regression analyses in SPSS. Conventional level of significance was applied, and results were deemed statistically significant at the .05 level (Fisher, 1925). Alpha coefficients (Cronbach's alpha) were estimated based on Nunnally (1978) reference. Although there are different reports about the acceptable values of alpha, ranging from  $\alpha = .70$  to  $.95$  (Bland & Altman, 1997; DeVellis, 2012; Nunnally, 1978), values between  $.70$  and  $.80$  were regarded as acceptable. Correlations between the study variables were estimated using Pearson's  $r$ . Significant correlations with values of  $\pm .1$  represent a small effect  $\pm .3$  display a medium effect and  $\pm .5$  a large effect (Cohen, 1988; Field, 2013). Fisher's  $r$ -to- $z$  transformation was used to test for potential differences between correlations. Missing was handled by exclude cases pairwise for all analyses conducted in SPSS. For the factor analysis in Mplus however, missing was handled with the expectation maximisation (EM) procedure, enabling parameter estimation by maximising the complete data log likelihood function (Dempster, Laird, & Rubin, 1977). For missing to be replaced with estimated values, only 3 or fewer items could be missing for each participant. Participants with more than 3 missing on the scale were excluded from the particular analyses, if they were included in other analyses.

### 2.4.1 Indexes

Sum scores were calculated for all study variables. The sum scores of the CPS subscales were based on the highest score within each parental couple. This means that for each item, the parent with the highest score was identified and kept for further analysis, whereas the answer from the parent who had the lowest score was excluded. In the case that both parents had the same score, it was decided to keep the father's score for each case. This method was used as a meaningful way of merging mothers' and fathers' scores to one combined score for parents to make the results easier to interpret. Another argument in favour of using the highest score within each couple was to avoid the parents' scores to cancel each other out. If one parent scored high on conflict and one parent scored low, an average would simply place them



within the average. By using the highest score however, the analyses would be sensitive to any conflict reported within the family. For the present thesis, the parent who contravenes the most is of greatest interest. Although it might be assumed that having one parent with more constructive conflict strategies, and who generally engage in less conflicts has a resilient effect on the child involved, it is however presumed that one parent's high conflict level is not rendered harmless by another parent's low conflict level.

Discrepancy scores were computed to investigate the coherence between the informant's reports of the child's internalising and externalising difficulties. In the past, researchers have utilised a number of different methods for examining the discrepancy's direction and/or magnitude. Reidler and Swenson (2012) suggest creating discrepancy scores by subtracting children-reported scores from parent scores or vice versa and using these scores as predictors of youth adjustment (Feinberg, Neiderhiser, Reiss, Hetherington, & Simmens, 2000; Guion, Mrug, & Windle, 2009; Pelton, Steele, & Forehand, 2001). In accordance with this method, fathers' sum scores were subtracted from children's sum scores, and mothers' sum scores from children's sum scores. This resulted in two discrepancy scores for each of the two subscales.

#### **2.4.2 Factor analyses**

As CPS was used on a Norwegian sample for the first time, a factor analysis to confirm the factor structure was necessary. Principal Axis Factoring were carried out separately for mothers and fathers to examine the factor structure for the 44 conflict strategy items; the original six-factor structure obtained by Kerig (1996) was not replicated. The subscale Physical Aggression had no variance; participants, with only a few exceptions, had answered '*never*' to the questions within the subscale, and it was therefore excluded from further analyses. The factor stonewalling was not possible to recreate as there were not enough items clustering under one factor. Consequently, the subscale was excluded from further analysis. To acquire an acceptable factor model for both mothers and fathers data, while maintaining Kerig (1996) original structure, a short scale was proposed, constituting 4 factors with 4 items on each. Item selection was based on the highest factor loadings for mothers and fathers, and item analysis based on estimated internal consistency (Cronbach's alpha), what gave theoretical meaning based on the original structure, and finally an evaluation of the model's fit to the data based on confirmatory factor analysis in Mplus. As there were relatively few response categories (only four), and the majority of responses were given on

the lower end of the scale (*'never'* or *'rarely'*), the measuring level for each question was defined as categorical in Mplus. In order to test whether the proposed factor model gave an equal good fit for both mothers and fathers, a Multigroup Confirmatory Factor Analysis (MGCFA) was conducted in Mplus to test for invariance (see Byrne, 2012). Lack of invariance implies that the construct (factors) being measured differs between the two groups, which means that the two groups cannot be compared regarding how the factors relate to other measures, such as SDQ. Moreover, the average sum scores cannot be compared across groups for the various factors. Therefore, measurement invariance is a premise for comparison between mothers and fathers on the modified version of CPS.

In order to compare whether the CPS factors relate differently to different concepts for mothers and fathers, the constrained model must be invariant. In the unconstrained model the factor structure is equal across groups, but the factor loadings are estimated independently. In the constrained model, the factor loadings are also constrained to be equal across groups. Because the constrained model is nested in the unconstrained model, measurement invariance model becomes more restrictive. MGCFA following this approach is widely accepted as the most powerful and versatile approach for testing measurement invariance (Steenkamp & Baumgartner, 1998).

To be able to compare the average sum scores on the individual CPS factors, it is a premise for the intercept on each item to be invariant across the two groups, meaning that the expected score for each item when the factor score is zero. The fit of the model was evaluated using several  $\chi^2$  goodness-of-fit-statistics; the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). As a general rule, a CFI above .95 and a RMSEA below .06 indicate a very good fit between the model and the data, whereas a CFI above .90, RMSEA below .08 is conventionally regarded as a reasonable fit (Hu & Bentler, 1999; Loehlin, 1998). Initially, the invariance testing was managed by inspecting whether the model's chi-square values increased significantly when the requirement for invariance was applied. However, this approach is immensely sensitive to sample sizes. According to Chen (2007), if the sample size is larger than 300, metric noninvariance is indicated by a change in CFI larger than .01, when supplemented by a change in RMSEA larger than .015 compared with the configural invariance model.

### **2.4.3 Gender differences in SDQ**

Gender differences between the children's mean scores for internalising and externalising problems was tested using independent samples t-test.

### **2.4.4 Bivariate linear regression analyses**

In order to investigate the relationship between the study variables, a correlation matrix was obtained. Bivariate linear regression was chosen as the appropriate method of data analysis to investigate the relationship between interparental conflict and the child's internalising and externalising problems. Linear regression was also applied to test whether interparental conflict could predict the discrepancy between the parent's and the child's report of the child's difficulties. Evaluation of the models was based on  $R^2$  whereas Beta ( $\beta$ ) was used to evaluate the independent variable's contribution to the model.

### **2.4.5 Moderation analyses**

The hypothesis that the effect of interparental conflict on children's internalising and externalising difficulties is moderated by children's gender was tested through hierarchical regression analyses. In the first step of the moderation analysis, an interaction term was created by multiplying the independent variable with the proposed mediator. The next step was to perform a hierarchical regression by entering the variables of interest in two steps, creating two separate models. Evidence of moderation exists when there is a statistically significant increase in  $R^2$  as the interaction term is included in the second model.

## 3 Results

### 3.1 Preliminary analyses

#### 3.1.1 Descriptive statistics and psychometric properties for CPS

To describe the variables' psychometric properties, descriptive statistics for the study variables were calculated. Basic psychometric properties of CPS are presented in Table 1.

Table 1

*Descriptive statistics of CPS based on the highest score within each couple*

Variable	N	M	SD	Range		Skewness	Kurtosis
				Potential	Actual		
Cooperation	362	2.22	1.67	0-12	0-9	0.58	0.47
Avoidance	364	7.21	2.25	0-12	0-12	-0.29	0.31
Child Involvement	364	2.92	1.79	0-12	0-8	0.46	-0.08
Verbal Aggression	364	6.38	2.19	0-12	0-12	-0.20	0.10
Frequency minor conflicts	364	3.85	1.16	1-6	1-6	-0.30	-0.53
Frequency major conflicts	364	3.57	2.09	2-12	2-10	1.15	0.18
Total conflict level	362	26.12	7.36	3-66	7-50	1.13	-0.07

*Note.* The variation in *sample size* is the result of some participant's lack of response to some questions.

Considering the four conflict strategies, parents scored lowest on cooperation (revised), reflecting that the parents generally seem to cooperate quite well when handling conflicts. Parents also seem to avoid inclusion of their child in their conflicts, as indicated by the low mean score on the conflict strategy child involvement. Considering the range, the sample also scored low on frequency of major conflicts. Overall, the sample scored relatively low on total conflict level, considering the potential full score of 66.

Obtained values for skewness indicated that the data were reasonably symmetrical for the different conflict measures, except for the variable frequency of major conflicts, which showed a substantial positive skew, meaning that the mass of the distribution was concentrated on the low end of the scale. In other words, parents reported a rare occurrence of major conflicts with partner, and a low level of conflicts overall.

The kurtosis values for all variables indicated that the variables neither displayed very heavy-tailed nor very light-tailed distributions, but was near normally distributed. Near normal distributions were also found by inspecting histograms and normal probability plots (normal q-q plots).

For the total level of conflict, there was a substantial positive skew, indicating that scores clustered towards the lower end of the scale. The kurtosis value was close to zero, indicating a symmetric distribution with no tail extremity. Furthermore, inspection of the scatter plots for the variables revealed no serious violation of the assumption of linearity, and there was only a small difference between the mean scores and 5 % trimmed mean scores, indicating that extreme scores or outliers had little influence on the obtained mean scores. The Kolmogorov-Smirnov and the Shapiro-Wilk statistics reached statistical significance for all scales ( $p < .001$ ). However, with reasonably large samples, skewness will not make a substantive difference in the analysis, and the risk of underestimate the variance with kurtosis is also reduced with a large sample (Field, 2013; Tabachnick & Fidell, 2013). For the variable total conflict level, the standard deviation was relatively high. Nevertheless, outliers were kept for further analyses, as these increased the variance in the sample. Outliers were expected, as severe interparental conflict is considered less frequent in a general population sample. Participants who actually reported high levels of conflict are assumed to express the expected variance, and are of special interest in light of the thesis' hypotheses. Overview of the questions included in the short scale, which was used in the present study is shown in Appendix C.

### **3.1.2 Descriptive statistics and psychometric properties of SDQ**

Table 2 shows descriptive statistics for SDQ. All informants reported relatively low scores for children's internalising and externalising problems. Considering the possible score of 20, the means reported in the present sample are low, and well below the cut-off points for both internalising (cut-off recommended at 9 in a general population sample) and externalising problems (cut-off recommended at 10) (Rønning, Handegaard, Sourander, & Mørch, 2004). This is also reflected in the skewness, which showed positive values for all variables suggesting that scores clustered somewhat at the low end of the scale. Children's reports of externalising problems were however more normally distributed than the rest of the variables. This variable also obtained the lowest level of kurtosis, indicating that the distribution is quite flat rather than peaked.

Table 2

*Means (M), standard deviation (SD) and sample size (N) for each subscale and informant*

	Informant	N	M	SD	Range		Skewness	Kurtosis	$\alpha$
					Potential	Actual			
Internalising Problems	Mother	352	1.97	2.14	0-20	0-11	1.36	1.85	.61
	Father	346	2.19	2.16	0-20	0-16	1.71	5.50	.59
	Child	336	3.05	2.45	0-20	0-16	1.20	2.41	.63
Externalising Problems	Mother	350	2.53	2.22	0-20	0-16	1.80	5.79	.71
	Father	349	3.09	2.31	0-20	0-14	1.38	6.13	.71
	Child	346	4.68	2.97	0-20	0-16	0.62	0.42	.72

### 3.2 Bivariate correlation analysis of the study variables

Table 3 shows correlations between the conflict variables were all positive and significant, although varying in strength. All measures of SDQ were positive and significantly correlated, generally displaying a moderate effect.

There was a significant correlation between total conflict level and all SDQ measures except from measures of internalising problems reported by both parents. This indicates that higher levels of conflict is associated with more internalising and externalising problems reported by children, and with higher level of externalising problems reported by mothers and fathers. The results also showed a significant correlation between children's report on both SDQ subscales as well as mother's report of externalising problems and the conflicts scales measuring child involvement and frequency of major conflicts. The strongest relationship between the conflict variables and SDQ was found between frequency of major conflicts and children's report of externalising problems and between child involvement and children's report of internalising problems. Thus, it seems that frequent conflicts of high severity was associated with elevated levels of children's externalising problems. Moreover, interparental conflict where the child is involved was associated with higher levels of children's internalising problems.

The inter-rater agreement between the SDQ subscales for mothers, fathers and children showed significant but moderate correlations between the informants. The highest inter-rater correlation was on the externalising problems scale between mothers and fathers.

The lowest inter-correlation was on the internalising problems scale between children and fathers. Overall, the agreement was highest between mothers and fathers on both subscales, although a little higher for externalising problems than for internalising problems. There was less agreement between children and fathers than it was for children and mothers on internalising problems. There was however, less agreement between children and mothers than children and fathers on externalising problems. Overall, the correlations were higher for all informant pairs for externalising problems than for internalising problems, although only marginal for the agreement between children and mothers.

Table 3

*Correlations between the study variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Cooperation	1												
2. Avoidance	.261**	1											
3. Child involvement	.236**	.170**	1										
4. Verbal aggression	.169**	.186**	.467**	1									
5. Frequency/minor conflicts	.223**	.208**	.529**	.430**	1								
6. Frequency/major conflicts	.289**	.229**	.512**	.416**	.619**	1							
7. Total conflict level	.532**	.561**	.716**	.691**	.703**	.765**	1						
8. Int. prob. Mother	-0.026	.114*	.074	-0.062	-0.020	.088	.051	1					
9. Int. prob. Father	.056	.038	.056	-0.049	.066	.085	.058	.506**	1				
10. Int. prob. Child	.018	.023	.170**	.079	.127*	.142**	.142**	.410**	.318**	1			
11. Ext. Prob. Mother	.090	.049	.144**	.094	.056	.142**	.151**	.391**	.312**	.190**	1		
12. Ext. Prob. Father	.176**	.064	.104	.035	.048	0.072	.124*	.221**	.420**	.145**	.585**	1	
13. Ext. Prob. Child	.108*	.023	.144**	.070	.110*	.197**	.165**	.149**	.133*	.423**	.411**	.416**	1

Note. \*  $p < .05$ , \*\*  $p < .01$ .



### 3.3 Factor analysis

A short version of the conflict strategies was developed. This model showed acceptable alpha values for both mothers and fathers (see Table B1 in appendix B). The results of the model testing based on 16 items by four factors is shown in Table 4. As shown, the CFI and RMSEA values were satisfying. Moreover, the difference between the two models (unconstrained and constrained) and the changes in CFI and RMSEA fell well below the criteria for measurement invariance between the groups. It is therefore reasonable to assume that the four-factor model is the same for both mothers and fathers. As the criteria for invariance in thresholds is already set in the first model (unconstrained), and as this model demonstrated a good fit, it is concluded that invariance in thresholds is reached. The final model including four factors comprising four items each indicated a good fit for both mothers and fathers, presenting a legitimate simplification of the CPS conflict strategies. See Table B2 in appendix B for standardised factor loadings for mothers and fathers. For correlations between the factors see Table B3 in appendix B.

Table 4

*Invariance testing Unconstrained and Constrained.*

	$\chi^2$	Df	RMSEA	CFI
Unconstrained model	650.117	219	.074	.936
Constrained model	668.113	231	.073	.935

*Note.*  $\chi^2$  = chi-square; df = degrees of freedom; RMSEA = root mean square of approximation; CFI = comparative fit index.

### 3.4 Level of interparental conflict can predict children's internalising and externalising problems

Table 5 shows simple linear regression analyses to test the hypothesis that interparental conflict can predict children's internalising and externalising problems. The two regression models showed significant positive relationships between interparental conflict and children's internalising problems and externalising problems. The results showed that interparental conflict explains 2% of the variance in children's internalising problems, and 2.7% of children's externalising problems. These findings support the hypothesis that higher levels of

interparental conflict are related to more internalising and externalising problems in the children.

Table 5

*Simple regression statistics independent variables children's internalising and externalising problems, with predictor variable conflict level.*

	$\beta$	$t$	$p$	$R^2$
Internalising problems	.142	2.61	.009	.020
Externalising problems	.165	3.09	.002	.027

*Note.*  $\beta$  = standardised beta coefficient,  $t$  = t-test statistics,  $p$  = significance value,  $R^2$  = R-squared.

### **3.5 Gender moderates the relationship between interparental conflict and children's internalising and externalising problems**

To check for gender differences in children's reporting of internalising and externalising difficulties, independent samples t-tests two tailed were conducted. Girls ( $M = 3.36, SD = 2.58$ ) reported significantly more internalising difficulties than boys did ( $M = 2.69, SD = 2.37$ ),  $t(329) = 2.46, p = .014$ . There was however no significant difference between girls' ( $M = 4.50, SD = 2.80$ ) and boys' ( $M = 4.91, SD = 3.17$ ) report of externalising difficulties,  $t(339) = -1.26, p = .207$ .

Table 6 shows the results from the simple regression testing the hypothesis that the relationship between interparental conflict and children's internalising and externalising problems differed between genders. The gender variable for children was split, and the regression analyses were repeated. The results indicated that interparental conflict might predict more internalising problems for girls, but not for boys (see Table 6). Furthermore, interparental conflict seems to explain 3.2% of the variance in children's internalising problems for girls, and 0.8% for boys.

For externalising problems, however, interparental conflict seems to have a significant effect on boys, but not on girls (see Table 6). Furthermore, interparental conflict explained 5.9% of the variance in boys' externalising problems and 1.1% of the variance in girls' externalising problems. Based on these results, conflicts between parents seem to be a predictor of more externalising problems for boys, but it appears not to have a predictive value for externalising problems for girls.

Table 6

*Simple regression statistics for the predictor conflict level for internalising and externalising problems for girls and boys.*

	$\beta$	$t$	$p$	$R^2$
Girls int. prob.	.179	2.41	.017	.032
Boys int. prob.	.092	1.13	.260	.008
Girls ext. prob.	.104	1.39	.167	.011
Boys ext. prob.	.242	3.13	.002	.059

*Note.*  $\beta$  = standardised beta coefficient,  $t$  = t-test statistics,  $p$  = significance value,  $R^2$  = R-squared.

Thus, there seems to be gender differences in children's internalising and externalising difficulties in relation to interparental conflict. To test whether this difference was statistically significant however, Fisher's  $r$  to  $z$  transformation was used, converting the correlation coefficient values ( $r$  values) into  $z$  scores. This resulted in  $z$ -scores of 0.8,  $p = .42$  and -1.3,  $p = .19$  for internalising and externalising problems, respectively. Thus, the relationship between interparental conflict and children's internalising and externalising problems does not differ significantly between girls and boys. Hence, there seems to be a tendency for more internalising difficulties for girls and more externalising difficulties for boys in relation to interparental conflict, although the significance between the two groups was deemed non-significant when tested.

As there was evidence for the hypothesis that interparental conflict can predict children's internalising and externalising problems, moderation analyses were applied to investigate whether gender moderates these relationships. The first moderation analysis aimed to determine whether gender moderates the effect of interparental conflict on children's internalising problems. The interaction term gender x conflict was constructed and entered in the second model in a hierarchical regression. Children's internalising problems was set as the dependent variable. As seen in Table 7, the interaction term was not significant in the model, and there was no significant increase in  $R^2$  from model 1 to model 2. Thus, there was no evidence to support an interaction effect of gender on children's internalising problems. That is, it seems that interparental conflict predicts internalising problems equally for boys and girls.

Table 7

*Effect of the interaction between gender and conflict level on children's internalising problems, without (Model 1) and with (Model 2) the interaction variable (conflict x gender)*

	Model 1		Model 2	
	b (SE)	B	b (SE)	$\beta$
Conflict level	.045 (0.018)*	.134*	.055 (0.058)	.162
Gender	-.626 (0.272)*	-.125*	-.457 (0.998)	.092
Conflict x gender			-.006 (0.037)	.044
$R^2$	.036		.036	
$\Delta R^2$			.000	

Note. \*  $p < .05$ . b= unstandardised beta coefficient, SE = standard error,  $\beta$  = standardised beta coefficient.

Table 8 shows the moderating effects of interparental conflict on children's externalising problems. The interaction term gender x conflict was kept in a second model in a hierarchical regression, with children's externalising problems set as the dependent variable. The effect of conflict level on children's externalising problems was moderated by gender, and this interaction effect was statistically significant ( $p = .05$ ).  $R^2$  increased significantly when the interaction term (gender x conflict) was included in the hierarchical regression ( $p = .053$ ). Hence, the hypothesis that interparental conflict and gender interact in their effect on children's externalising problems was supported. That is, interparental conflict was a stronger predictor of children's externalising problems for boys than for girls.

Table 8

*Effect of the interaction between gender and conflict level on children's externalising problems, without (Model 1) and with (Model 2) the interaction variable (conflict x gender)*

	Model 1		Model 2	
	b (SE)	$\beta$	b (SE)	$\beta$
Conflict level	.069 (0.022)*	.170*	-.055 (0.067)	-.137
Gender	.474 (0.320)	.080	-1.710 (1.167)	-.287
Conflict x gender			.084 (0.043)*	.474*
$R^2$	.033		.044	
$\Delta R^2$			.011*	

Note. \*  $p < .05$ . b= unstandardised beta coefficient, SE = standard error,  $\beta$  = standardised beta coefficient.

### 3.6 Level of interparental conflict can predict the discrepancies between children's and parents' report of the child's internalising and externalising problems

Figure 1 shows the discrepancy scores between informants. As shown, children report significantly more internalising and externalising problems than their mothers and fathers report. Overall, the discrepancies are largest for mothers and children on both internalising and externalising problems, indicating that in the present sample, mothers were significantly less sensitive to their child's difficulties than fathers. The least difference was found between father and mothers, although the differences were significant. The discrepancy is overall larger for externalising problems than for internalising problems for all informant pairs. This indicates that parents are more sensitive to their child's internalising problems than they are to their externalising problems. Moreover, mothers and fathers are less coherent in their perception of their child's externalising problems than internalising problems.

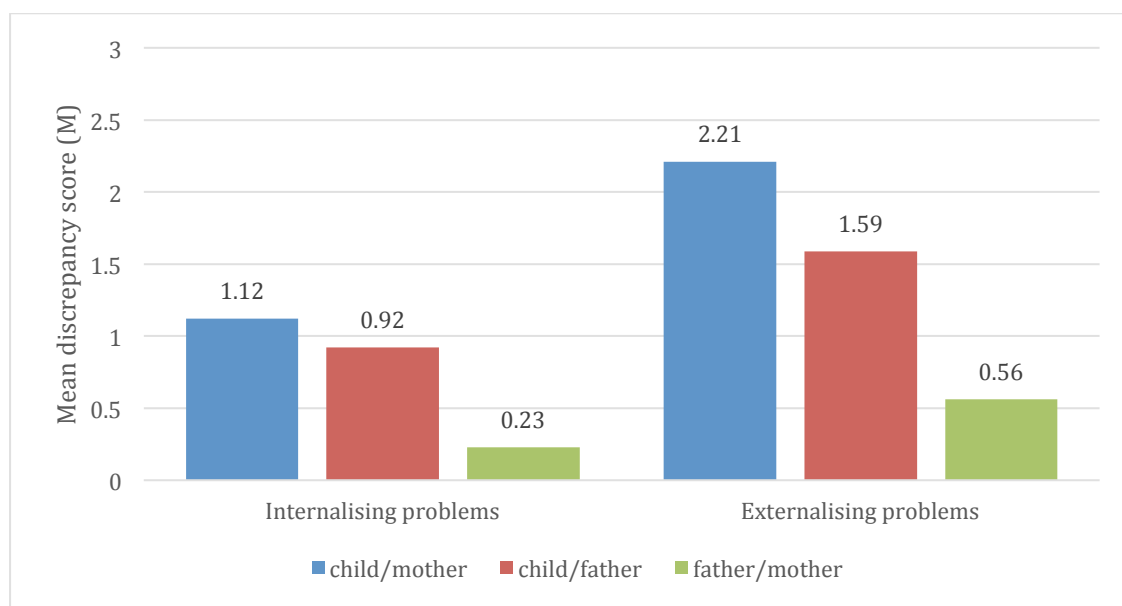


Figure 1.

*Mean discrepancy scores for mothers, fathers and children for reported difficulties for internalising and externalising problems.*

*Note.* All three groups were significantly different from each, both for internalising problems and for externalising problems at the level of  $p < .05$ .

To test the hypothesis that interparental conflict can predict the discrepancies between parents' and children's reports of the child's internalising and externalising problems, simple linear regressions were calculated. All negative values in the discrepancy scores between parents' and children's reports were excluded to make the results more interpretable and to assure that any negative values did not cancel out the positive values. The results failed to support this hypothesis as there was not found any significant relationships, neither for the coherence between children and parents on internalising problems nor for the coherence between children and parents on externalising problems (see Table 9).

Table 9

*Simple regression statistics for the relationship between interparental conflict and coherence between informants on children's internalising and externalising problems*

	$\beta$	$t$	$p$	$R^2$
Child/mother int. prob.	.084	1.33	.185	.007
Child/father int. prob.	.108	1.65	.100	.012
Child/mother ext. prob.	.101	1.69	.092	.010
Child/father ext. prob.	.082	1.33	.184	.007

*Note.*  $\beta$  = standardised beta coefficient,  $t$  = t-test statistics,  $p$  = significance value,  $R^2$  = R-squared.

## **4 Discussion**

The present thesis aimed to explore the relationship between level of interparental conflict and children's internalising and externalising problems. Measure of conflict level was based on the frequency of minor and major conflicts, as well different conflict strategies, i.e. cooperation, avoidance, verbal aggression, and child involvement.

As hypothesised, the present results point to significant associations between interparental conflict and children's internalising and externalising problems, even though these associations may be characterised as small. In line with previous research, higher levels of interparental conflict seem to be related to more internalising and externalising problems in children. In respect to gender, there was a tendency for more internalising difficulties for girls and more externalising difficulties for boys in relation to interparental conflict. These gender differences were however not statistically significant. There was not found a moderation effect of gender on the relationship between interparental conflict and children's internalising difficulties, thus rejecting the second hypothesis. Gender did however significantly moderate the relationship between interparental conflict and children's externalising difficulties; boys experiences more externalising problems than girls in relation to interparental conflict. Finally, the present study found no relationship between interparental conflict and the coherence between parents' and children's report of the child's internalising and externalising difficulties.

### **4.1 Level of interparental conflict can predict children's internalising and externalising problems**

Firstly it was hypothesised that level of interparental conflict can predict children's internalising and externalising problems. The current findings showed that interparental conflict was a significant predictor of both internalising and externalising problems for children in the current sample. In other words, the higher level of interparental conflict the higher levels of internalising and externalising problems in the children.

This is in line with previous research, which has presented robust support for the relationship between interparental conflict and children's internalising and externalising problems (Cummings, Goeke-Morey, & Papp, 2004; Davies & Cummings, 1998; El-Sheikh et al., 2009; Franck & Buehler, 2007; Shelton & Harold, 2008). Some international studies

have also found interparental conflict to be a robust predictor of children's externalising behaviour (Cummings et al., 2004; El-Sheikh et al., 2009; Franck & Buehler, 2007; Shelton & Harold, 2008).

The effect sizes between total conflict level and children's difficulties in this sample were significant, but small, measuring  $r = .14$  and  $.17$  for externalising and internalising problems, respectively. Research has shown varying effect sizes depending on the type of conflict (e.g., overt vs. covert), and children's difficulties. The effect size is typically larger for overt conflicts than for covert conflicts (Breivik & Olweus, 2006; Buehler et al., 1997). In the present study, conflict level was a measure of different dimensions of conflict, thereby catching the different nuances.

Inspecting the different conflict dimensions in relation to children's difficulties, the conflict strategy child involvement, as well as frequency of minor and major conflicts showed significant, positive relationships to children's internalising and externalising difficulties. Lack of parental cooperation also showed a significant, positive association with children's externalising problems. These associations may be seen in light of different theoretical perspective proposed by the Family Systems Theory (Bowen, 1993). Firstly, the association between child externalising problems and parent's lack of cooperation can be explained by the theory of intensification. When parents seem unable to cooperate, the child intensifies his or her behaviour problems in an attempt to reunite otherwise disengaged parents. The theory of triangulation may help explain the association between parents' use of the conflict strategy child involvement and children's internalising and externalising difficulties. Lastly, the association between more frequent (both minor and major) conflicts between parents and more internalising and externalising difficulties in the child may be seen in light of the spillover effect. The more frequently parents engage in conflicts the more preoccupied they get, which shapes ineffective parenting and ultimately children's development.

As conflict was based on several dimensions, one could perhaps have expected larger effect sizes in the present study. On the other hand, as this was a general population sample, there was quite little variance on the outcome variables to be explained. Although some research has found that interparental conflict predict internalising problems equally as well as externalising problems (Davies & Cummings, 1998), there is a tendency for smaller effect sizes for internalising than for externalising problems, as was found in the present study (Breivik & Olweus, 2006; Buehler et al., 1997).



There is a strong consensus that children in high-conflict homes are especially vulnerable for development of problem behaviours. That parental conflict is a significant predictor of children's difficulties also in this low-conflict sample gives rise for concern. Presumably, these effects would be stronger in samples with higher levels of conflict. Longitudinal and cross-sectional studies have shown that internalising problems typically start at 12 years of age and increase into adolescence (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Rønning et al., 2004; Zahn-Waxler, Shirtcliff, & Marceau, 2008). A similar tendency has been found for externalising problems, except for a typically earlier onset (Costello et al., 2003; Zahn-Waxler et al., 2008). In light of the present findings, Norwegian children living in high-conflict homes are at elevated risk of developing behavioural problems. Moreover, the symptoms will most likely increase, as the child gets older.

Alternatively, the relation between interparental conflict and child behaviour problems may reflect, to some extent, genetics. Researchers in the field of behaviour genetics have suggested that many of the links between family risk factors and children's adjustment are not entirely environmental, but has a strong genetic component (Towers, Spotts, & Neiderhiser, 2001). Thus, parents with problematic personality traits are more likely than others to experience marital discord. Because parents transmit some of their traits to their children, these children are prone to a variety of problem behaviours. According to this view, genetically predispositions are connecting parents' problem behaviour, marital discord and children's adjustment problems (Amato & Cheadle, 2008).

As previously mentioned, there is very little Norwegian and Nordic research on interparental conflict and children's difficulties in families where the parents live together. The extensive research, especially from the U.S., has indeed been an important contribution. This research should however be reviewed with caution considering the prominent cultural differences. In light of this perspective, this Norwegian study is of particular value as it makes a considerable contribution in confirming previous findings also in a Norwegian sample of families where the parents live together.

## **4.2 Gender as a moderator between inerparental conflict and children's internalising and externalising problems**

### **4.2.1 Gender differences in children's internalising and externalising problems**

The present study found gender differences in children's internalising difficulties. The girls in the present sample reported significantly more internalising problems than boys did. This supports previous research, both internationally (e.g., Collishaw et al., 2009; Van der Meer, Dixon, & Rose, 2008), and from Norwegian samples (e.g., Rønning et al., 2004). For externalising problems however, there was found no significant differences between girls and boys. This might seem surprising, considering the general finding that boys predominate girls in rates of externalising problems (e.g., Lewinsohn, Hops, Roberts, Steeley, & Andrews, 1993; Rønning et al., 2004; Zahn-Waxler, 1993). However, there is evidence that the gender differences in externalising behaviour are diminishing (Bask, 2015; Galambos, Barker, & Almeida, 2003). Theories explaining the manifestation of internalising and externalising problems in children have argued that this is part due to gender role expectations. Emotional sensitivity and expression of feelings and emotions are traits in accordance with the female gender role. Boys however, are to an extent taught to inhibit their emotional responses (Chaplin, Cole, & Zahn-Waxler, 2005).

The socialisation process of gender roles teaches children how to behave in accordance with their gender, and this could be an explanation for the finding that girls report more internalising problems than boys. Traditionally, the male gender role has been characterised by more externalising behaviour. Boys are expected to be more physical and active than girls, and the acceptance of aggressive and rule-breaking behaviour is generally higher than it is for girls. Girls on the other hand, are taught to inhibit externalising behaviour. This however, is not in line with the current finding that there is no difference between girls and boys for externalising difficulties.

The Norwegian society is characterised by high aspirations regarding gender equality. Equal opportunities for men and women in labour, household, and parental benefits are contributing to a society with equal rights and privileges for both genders, which has been a cornerstone in Norwegian politics in recent years (Malik, 2014). Girls are encouraged to claim their ground, to be more self-reliant and ambitious, and are cheered on to achieve things independently of men. In short, girls are motivated to be more like boys. Therefore the present findings might actually be in line with the current changes in our society. And one

might wonder whether girls can act more like boys without increasing their externalising behaviour. This understanding is supported by a study on Swedish adolescent boys and girls, where Bask (2015) findings are in accordance with the results from the present study. She explains her findings based on the same arguments as seen above, emphasising the effect of a society characterised by gender equality on children's development.

Age might also be a contributing factor to the present findings. It might be that externalising behaviour in girls as young as 11 years old is accepted to a greater extent than it would be if they were older. Whereas externalising behaviour in children is considered as a "normal" part of their childhood development, this behaviour would be considered as problematic once they reach adolescence. When child behaviour is accepted, it will probably also be more pronounced in the child. Another explanatory factor is the tendency for low levels of perceived difficulties reported in the current sample. Based on a large community sample, Rønning et al. (2004) have suggested a Norwegian cut-off criterion of 9 for internalising problems and 10 for externalising problems. The average sum score for the children in the present sample was under half of the cut-off point for clinical range for externalising problems. For internalising problems, the average score was one third of the advised cut-off point. This is however, as expected in non-clinical samples, as most children in general population samples have relatively few problems. Girls exhibiting externalising behaviour on the low end of the scale will probably not be perceived as problematic, and their behaviour will therefore not be turned down by adults. And as argued above: when adults accept the child's behaviour, this behaviour will subsequently also be more pronounced in the child. This could be an explanation for why girls and boys exhibit the same level of externalising difficulties in the present sample.

#### **4.2.2 Interparental conflict predicts internalising and externalising problems differently for boys and girls**

The present findings showed that the predictive value of interparental conflict on children's difficulties differed somewhat for girls and boys. Conflicts between parents seem to be a significant predictor of more internalising problems for girls, and for more externalising problems for boys. Based on previous findings, these results could be expected; Boys tend to manifest their difficulties in externalising behaviour, whereas girls appear to have more challenges with internalising symptoms (e.g., Jenkins & Smith, 1991; Zimet & Jacob, 2001).

Furthermore, some researchers have argued that interparental conflict is a robust predictor of children's externalising problems, (e.g., Cummings et al., 2004; El-Sheikh et al., 2009; Franck & Buehler, 2007). There is less evidence for interparental conflict as a predictor for internalising problems (e.g., Buehler et al., 1997), although some have found evidence for this (Cummings, Schermerhorn, Davies, Goeke-Morey, & Cummings, 2006; Kerig, 1998). Gender differences in the relationship between interparental conflict and children's internalising problems are however less researched. Therefore, the present findings are contributing to the existing literature, which has failed to detect a consistent relationship between conflict, child adjustment and gender. It should however be noted that the present findings only show tendencies for more internalising difficulties for girls and more externalising difficulties for boys in relation to interparental conflict, as the two groups did not differ significantly from each other.

#### **4.2.3 Gender as a moderator in the relationship between interparental conflict and children's externalising problems**

The present study found no evidence to support a moderating effect of gender on the relationship between interparental conflict and children's internalising problems. There was however a significant effect of gender as a moderator for externalising problems. Conflict was a stronger predictor of externalising problems for boys than for girls.

The present findings support FST's male vulnerability model. They can also be seen as being in accord with the notion that boys' maladjustment manifests as externalising problems behaviour. These findings add to the meagre and inconsistent research investigating this specific link. As mentioned, previous studies have generally failed to find moderator effects on the direct effect of interparental conflict on children (e.g., Buehler et al., 1997; Kitzmann et al., 2003; McDonald & Grych, 2006). The few studies, which have found an effect, have yielded controversial findings; some studies have found support for the male vulnerability model, some for the differential reactivity model, whereas others have found minimal differences by gender.

It must be noted that the size of the moderating effect of gender on the relationship between interparental conflict and children's externalising problems was quite small, even though it was significant. Interaction effects in social science research typically explain 1-3 % of the total variance (see e.g., Chaplin, 1991). And according to Evans (1985), a moderating effect should be considered important even though it explains only 1 % of the total variance. Hence, even though the moderating effect of gender on the relationship

between interparental conflict and children's externalising behaviour must be characterised as small, it may still be considered meaningful and important. Perhaps especially as most studies has failed to find any significant moderating effect of gender.

### **4.3 Level of interparental conflict could not predict the discrepancies between parents' and children's report of the child's internalising and externalising problems**

The present results failed to support the hypothesis that level of interparental conflict could predict the discrepancies between parents' and children's internalising and externalising problems. This hypothesis was based on the notion that parents who find themselves in difficult life situations might show bias in their reports on children's emotional and behavioural difficulties. There is a lack of research on how informant discrepancies vary across families in different life situations, and with different challenges. According to Najman et al.'s (2001) findings, one could assume that there would occur a distortion of judgement in parent's observation of their children's problems in high-conflict families due to the distress.

A theoretical argument in line with the FST, is that interparental conflict is so emotionally draining to parents that it affects children indirectly by altering parenting practises, such as parents' ability to recognise and respond to their children's need. According to the spillover effect, parents' preoccupation with their own conflicts impairs most dimensions of their child-rearing practices. This could possibly have explained the outcome if parents had reported less difficulties than the child in families with higher levels of interparental conflict. If parents had reported more difficulties however, the idea that parents intensity children's symptoms in order to distract themselves from their marital problems. This was conceptualised as the "family scapegoat". The scapegoat is often a product of stressful or destructive family dynamics, and could therefore help explain the outcome if parent's engaging in higher levels of conflict had reported significantly more difficulties than the child did.

The overall low levels of interparental conflict in the present sample may partly be responsible for the lack of support for this hypothesis. This was a selected sample from the general population as it consisted of families where the parents still lived together when the children were 11 years old. This may be an indicator that the families had rather stable family

environments, reflecting the overall low levels of conflict. Therefore, it is possible that a sample of high-conflict families would have generated different results.

## **4.4 From research to practice**

This study shows that even low levels of interparental conflict can lead to child maladjustment. It also shows that interparental conflict affects boys and girls differently. The present results indicate that preventing conflicts between parents will be important in preventing children's difficulties. There are many actors surrounding the child and family who are important in a preventative perspective. Examples of these are health centres, the Family Councelling Services, the Child Welfare Services, kindergartens and schools. Furthermore, the cooperation between these actors is crucial and can prevent conflicts between parents, and thus also children's difficulties. In a preventative perspective, it is also crucial that research-based knowledge reaches the practice field.

### **4.4.1 Preventing interparental conflicts**

In Norway, family counselling and parental guidance are offered as a preventative measure against marital problems, for example through Family Councelling Services. Through these kinds of services, parents can get therapy, advice and counselling when problems, conflicts and crises arise in the family. The service is free of charge, and no referral is necessary, and is thus a low-threshold service.

Thuen has argued that if one wishes to approach first-time parents, it seems that one should preferably start before the child is born, and that the offer should also last for a longer period after birth. He furthermore argues that the offer should be concentrated to a greater extent; that the municipalities should identify which couples are at risk of marital problems after birth and provide these with a closer follow-up. Ideally, midwives and/or public health nurses should be taught to map the marital quality of couples that are about to be parents. Based on this, they could offer parents who are experiencing problems a more targeted follow-up (Holm, 2016).

### **4.4.2 Kindergarten and school as preventive actors**

In addition to the family, the kindergarten and school are the two most important arenas for mental health and disease preventative work in Norway (Machenbach, Lingsma, van

Raveseyn, & Kamphuis, 2012; Rose, 1993). In order for schools and kindergarten to succeed in their preventive work, they must be familiar with risk factors, and they must be prepared to identify mental difficulties as soon as they manifest in the child. In addition, they must know the various actors in the support system so that they can request assistance when necessary. Educational and psychological counselling service is a key partner.

The mental health of children largely influences their development and learning. This is something that the personnel in kindergartens and schools must consider. Furthermore, we know that parents are of great importance in preventing mental health problems in children. Often there will be observations of the child's behaviour, which means that employees in kindergarten and school may suspect problematic family relationships. Conversations about such private topics will usually be experienced as difficult. However, an important part of the professional work is to talk with parents when family relationships are discovered which inhibits the child's opportunity for learning and development. Parental conversation (developmental talks) can be a suitable device in this context. Through conversation, a common understanding of the child's psychosocial needs and how the needs can be met in appropriate ways can be created. The Day Care Institutions Act (Kunnskapsdepartementet, 2006) and Act relating to primary and secondary education and training (Kunnskapsdepartementet, 1999) with regulations, require that school and kindergarten facilitate cooperation with the parents, such as planned development talks. Kindergartens and schools must of course make it easy for children to express difficult emotions.

Furthermore, it is important for the kindergarten/school and the Family Counselling Services to keep a close dialogue. Personnel who work with children need to know where parents can approach if they see that they have difficulties in the marital relationship that affects the child. The personnel might be anxious to address these kinds of difficulties, worrying that they have to deal with the situation on their own, which they may not feel like they have the competence for.

#### **4.4.3 Sensitivity in the interaction between personnel and children**

Internationally, we have mainly studied structural indicators of quality in day care and school. Examples may be adult-child ratio, group size, staff education and educational programs. Recent Norwegian research has, however, revealed that the procedural indicators are of greater importance for children's psychosocial functioning. This is especially true of the interaction between adults and children, where the staff's sensitivity, individualised

stimulation and interaction with the child is central. Good interactions with the child are associated with a decrease in internalising and externalising problems (Wang et al., 2014). Parents in conflict will often be concerned with their own problems so that the child's needs are partially set aside. We have to assume that a relationship characterised by sensitivity and interaction in itself seems preventative because the child is seen and met throughout the day in kindergarten or at school. We must further expect that relationships characterised by such qualities will increase the ability to capture and prevent worrying behaviour even in children with relatively marginal difficulties.

#### **4.4.4 Need for expanded gender role understanding**

Considering difficulties in general, the girls in this study scored significantly higher on internalising difficulties than boys. This complies with a wide range of international studies. However, we find no significant difference between girls and boys regarding externalising difficulties. This is interesting because it differs from findings in previous research and because it challenges our way of understanding gender roles. It may seem that the girls have gained a larger behavioural repertoire compared to the boys.

This study further shows that interparental conflict has different effects on boys and girls. There seem to be a stronger relationship between interparental conflict and externalising problems for boys than for girls. This is supported by previous studies that indicate that boys are more vulnerable than girls e.g. (Block et al., 1981; Kerig, 1996, 1998). An explanation may be that parents believe that they tolerate more than they do, and therefore put less ties when sons who are witnessing conflict (Thuen, 2002).

Conception of gender roles affects the child's development at an early stage. The child interprets the signals the environment gives in response to their behaviour, and learns what is acceptable, important and correct (Larsen & Slåtten, 2010). Parents and educators in kindergarten and school must be aware of this and challenge their own views through reflection and discussion: What consequences do we have if we force children into stereotype behavioural patterns? What do we look for when we observe and map? What are we at risk of overlooking when we have fixed expectations about gender? Regardless of gender, we must help the child to express feelings and to talk about what is difficult. Instead of being concerned with what is expected and appropriate gender behaviour, we should focus on what the individual's needs are.



#### **4.4.5 Important communicators**

Educational institutions in health and education are important communicators of research-based knowledge towards the field of practice. It is crucial that updated knowledge of how parental conflict may affect the child's mental health is included as a natural part of curriculum in education and continuing education programs. This will strengthen the competence not only of educational staff in schools and kindergartens, but also in first-line health services, such as public health centres and health worker employed at the schools. To reach a wider audience, research has to be conveyed in suitable channels and in a language people understand. This could perhaps be through brochures and popular science articles at general practitioners, at the health centre and in social media and the like. Here, both the researcher and the education institutions have a responsibility.

### **4.5 Limitations**

The findings of the present study must be interpreted in context of methodological limitations. The most important ones are limitations are related to Conflict and Problem Solving Scale as a suitable measure of interparental conflict on a Norwegian sample, limitations regarding the methods used in this study, and limitations of the current sample.

#### **4.5.1 CPS as measurement of interparental conflict**

CPS was used on a Norwegian sample for the first time, and it turned out to be challenging to replicate the original factor structure. Understanding the effects of interparental conflict on children has been limited in Norway, part due to the available measures of the parental relationship that could be applied on larger samples. Therefore, it has been of great importance to obtain a measure that would be effective in assessing the aspects of couple quality that may affect child development, in Norwegian samples. Thus, investigating the psychometric properties of the scale has been an important work in itself.

The size of the sample should not have been problematic, as it was larger than the recommended size of 300 (Tabachnick & Fidell, 2013). In the present study, scores on the different measures of conflict dimensions proved to be quite skewed. This may have contributed to the relatively small effect sizes obtained, since there was little variance on the outcome variables to be explained. Skewed distribution on the conflict scale is likely part due to cultural factors. Perception of, and the frequency of which, the different conflict strategies

were used might be culturally dependent. For example, there was insufficient variance in the questions related to physical aggression in the present sample. Aggressive conflict tactics might be more used in the U.S. compared to Norway. Any signs of physical aggression in front of children are deemed unjustifiable in the Norwegian culture, and parents are likely to be very aware of how they act around children. The North-American culture might be more acceptant to aggressive behaviour in an outburst. It should also be noted that physical aggression perhaps is regarded as especially inconceivable in the present sample; parents with high socioeconomic status may be even less likely to behave in socially unacceptable manners in family settings (Cho, 2012). Therefore, the lack of variance might not only be due to cultural differences, but also the selection in itself.

Under reporting might also help explain the lack of variance in this subscale. This is a sensitive topic, and the negative attitudes towards any use of physical aggression in family settings might scare informants from answering truthfully. It is of course also possible that they underestimate the severity of the conflict strategies they habit.

The factor stonewalling was also excluded from the modified scale, as it was not possible to recreate. The items that originally belonged under this factor were rather spread out across other factors. This indicates that the participants in this sample had a different interpretation of these questions than the original, American, sample had. Perhaps these questions were not appropriate to the Norwegian sample, and in that sense did not measure an underlying construct. This might also be due to cultural factors. This is also evident in the factor depicting verbal aggression. The least hostile and aggressive questions had the most variance, and were therefore used in the modified scale in the present study.

Another difficulty in replicating the original scale was the difference in factor structure between mothers and fathers. This might be part due to gender differences in the endorsement of the various conflict strategies. How mothers and fathers differed in what conflict strategies they most frequently engaged in might also be a factor. E.g. Kerig (1996) found that women tend to engage in verbally aggressive conflict strategies more frequently than men, whereas men used withdrawal as a strategy more often than women. This problem could have been avoided by converting mothers' and fathers' reports into z-scores and then summed together to create a single parent composite. For the full (original) scale, mothers and fathers seemed to have different perceptions of some of the constructs being measured. Therefore it was deemed more appropriate to develop a short scale that only included concepts that were understood in the same way by both mothers and fathers. The analysis of the short scale obtained satisfactory results however, and the short scale proved to be a

sufficient measure of interparental conflict for the present sample. When this is said, the modified scale of conflict strategies developed and applied in the present study was established as a suitable measure of conflict for the current sample.

Total conflict level also included a measure of frequency of minor or major conflicts between parents. What is considered minor and major conflicts can be up for discussion, and relies on each participant's subjective interpretation. The same reasoning can be applied to the response alternatives. What is considered "rarely" or "often" is sensitive to subjective interpretation.

#### **4.5.2 Method of data collection**

The present study used self-report questionnaire as data collection method. Social desirability, i.e., a respondent's tendency to provide answers that he or she believes are socially acceptable, has been identified as a limitation for this method. Perhaps in particular for sensitive topics such as the present one. The questions may also be ambiguous, or open for interpretation, which may influence the obtained answers. Finally, even if participants intend to answer honestly, they may lack the introspective ability to provide an accurate response to a question. An advantage however, is the opportunity to obtain information or measure a construct that is otherwise not easily observable. Moreover, self-report provides the subjective opinion or interpretation of a particular phenomenon from the participant.

The use of multi-informant assessment is a strength in the present study. This provides valuable insight into families from three different perspectives. This helps generate a more nuanced and thorough understanding of interparental conflicts and the underlying mechanisms, as well as consequences of conflicts for both parents and children. In addition, the multi-informant approach provided insights into how children's internalising and externalising difficulties were perceived by parents compared to what the child reported, in relation to conflict level in the family.

Challenging the validity in the present study, interviews rather than questionnaires would perhaps be a more appropriate method for data collection. There are several reasons for this reflection: Children are very loyal to their parents (Cohen, 1984), and considering the sensitive theme in this project it is uncertain how truthfully children in high-conflict families would answer. Furthermore, the children in this sample are only 11 years old and there are likely considerable differences in cognitive level, resulting in great variance considering their understanding of the questions. A consequence of this might be that children who do not fully

understand all the questions in the questionnaire will require help from an adult - most likely a parent. This challenges the validity of the study, as the participating children might give answers influenced by a parent. Thus, with the assumption of available resources and that the appropriate framework conditions are met, it might be more ethically justifiable to use interviews when collecting data from this group. In this way, a competent researcher could sit down with the child and make subjective decisions on how best to collect the data, either by going through the questionnaire question by question, or simply just be available to the child if needed. This would provide more valid answers, and minimise the challenges considering differences in the children's cognitive level. Another beneficial side of using interviews as data collection is the given opportunity for the researcher to be attentive to the child's reactions to the questions throughout the interview. If the questions seem in any way to trigger emotional reactions in the child, the researcher would be there to attend to the child and make decisions on how to proceed and would be able to evaluate the need for continued observation for the child. This is perhaps more an ethical consideration than a methodological one, it should however be considered.

#### **4.5.3 The present sample**

The response rate in the present study was only 14.6%. Participation rates in population studies are often low, and therefore one may question the representativeness for Norwegian families at large. Furthermore, MoBa participants have been found to be somewhat better educated and generally have a higher socioeconomic status than the rest of the population, and risk groups are under-represented (Oerbeck et al., 2017). Moreover, these 14.6% refer to family triads. This means that three different family members had to agree to participate in the study. It is conceivable that this factor contributed to a sample where the families with most conflicts did not participate.

The child's age might influence the vulnerability and how they are affected by interparental conflict e.g., (Benson, Buehler, & Gerard, 2008; Cummings et al., 1981; El-Sheikh et al., 2009). The children in the present sample were all 11 years old. The findings in the present study should therefore not be generalised to younger children or adolescents. Moreover, the possible effects of developmental differences among the children were not taken into consideration.

The parents had been together for 20 years on average (since 1996). In response to relationship satisfaction, most parents answered "fairly happy" or "extremely happy". In

regard to the different conflict dimensions, there were low scores on destructive conflict strategies and high scores on the constructive strategy, measured by level of cooperation. These factors depict stable families with low levels of conflicts. This is also mirrored in the low score on total conflict level obtained in this study. Hence, the current sample may be too narrow to display much variance in conflict level. Although the present study found effects of interparental conflict on children's problem behaviour, one may assume that these effects would have been more prominent in a high-risk sample. Perhaps a more high-risk group would give support for the hypothesis that level of interparental conflict can predict the discrepancies between parents' and children's reports of the child's internalising and externalising problems, which was rejected in the present study.

However, one should not undermine the findings from a low-risk sample such as the present one. As it seems, also low levels of interparental conflict in families where the parents live together, can be harmful to children. Moreover, estimates of bivariate associations between variables may be quite robust against selective attrition even when estimates of means are heavily biased (Gustavson, van Saest, Karevold, & Røysamb, 2012). Through advanced calculations (simulation studies) and surveys in a Norwegian sample, they found that although a sample is skewed, the strength of the relationship between variables remains relatively constant. Attrition rate affected mean estimates but not regression estimates (Gustavson et al., 2012). Thus, it is reasonable to rely on the relationship found between variables in a selected sample such as the present one, although it cannot be used to address the occurrence of conflicts in families in Norway.

## **4.6 Future directions**

Future studies should include measures that will be effective in assessing all aspects of relationship quality that may affect child development. CPS is a comprehensive measure, but due to cultural factors it does not capture the aspects of conflicts in Norwegian families in a sufficient manner. A revised version should be developed that will extend the appropriateness of the measure to the Norwegian culture.

Structural interviews should be applied to obtain a more thorough understanding of family conflict and how parents negotiate their differences. Interviews as data collection for children's report would be beneficial for several reasons. It would give the researcher the opportunity to adapt the interview to each child regarding cognition and how the child's adapts to the situation. This would also increase the validity of the data.

Conclusions about the causal relationship between interparental conflict and child adjustment are limited because the vast majority of studies conducted in this area are cross-sectional. There is a lack of longitudinal investigations examining relations between interparental conflict and child adjustment, which should further investigate the hypothesis that exposure to conflict predicts children's internalising and externalising problems, also in a longitudinal perspective. Samples including both low-risk and high-risk conflict groups should be investigated. This would provide more varied levels of conflict, and presumably produce larger effect size.

The impact of child gender on the relationship between interparental conflict and child development remains both controversial and understudied. Future research should examine gender as a focal variable in the link between interparental conflict and child adjustment. Perhaps more sensitive measures and research designs are required to uncover potential gender differences. Furthermore, it is possible that gender moderates links between exposure to specific dimensions of interparental conflict (e.g. different conflict strategies or resolution styles) and children's adjustment. Perhaps also the gender of the parent exhibiting these conflict styles is determinant for how it affects girls and boys differently. Likewise, future studies should try to uncover whether the moderating role of gender varies as a function of developmental period.

Challenging the traditional notion that girls exhibit internalising behaviour and boys exhibit externalising behaviour calls for further investigation. There might actually be a shift in gender roles challenging this traditional belief, which will have consequences for identifying problem behaviour in children.

## **4.7 Conclusion**

The present study explored the relationship between interparental conflict and children's internalising and externalising problems. The main finding was that level of interparental conflict could predict children's internalising and externalising problems. This is in line with previous research, however it is an interesting finding as it shows that interparental conflict is a risk factor for children even in low-conflict families.

Furthermore, the effect of interparental conflict on children's externalising problems was moderated by gender; conflict was a stronger predictor of externalising problems for boys than for girls. This might be explained in light of the male vulnerability theory, which suggests that boys are posited to be more susceptible to the harmful effects of interparental

conflict than girls. Additionally, these findings may indicate that girls have gained a broader behavioural pattern than what is often found in the literature. In addition to exhibiting more internalising difficulties than boys do, they also appear to display the same amount of externalising behaviour as boys. It is suggested that this might be part due to a shift in gender roles as girls has gained a broader behavioural repertoire.

In preventive and mapping work, we may therefore need to adjust our expectations for gender-specific behaviour. The present findings can lead to a more nuanced understanding of how interparental conflict affects children.

## References

- Achenbach, T. M. (1991). *Manual for the youth self-report and 1991 profile*: Department of Psychiatry, University of Vermont Burlington.
- Achenbach, T. M., & Edelbrock, C. (1987). *Manual for the youth self-report and profile*. Burlington: University of Vermont: Department of Psychiatry.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*, 213-232. doi:10.1037/0033-2909.101.2.213
- Amato, P. R. (2000). The Consequences of Divorce for Adults and Children. *Journal of Marriage and Family*, *62*(4), 1269-1287. doi:10.1111/j.1741-3737.2000.01269.x
- Amato, P. R. (2001). Children of Divorce in the 1990s: An Update of the Amato and Keith (1991) Meta-Analysis. *Journal of Family Psychology*, *15*(3), 355-370.
- Amato, P. R. (2010). Research on Divorce: Continuing Trends and New Developments. *Journal of Marriage and Family*, *72*(3), 650-666. doi:10.1111/j.1741-3737.2010.00723.x
- Amato, P. R., & Cheadle, J. E. (2008). Parental Divorce, Marital Conflict and Children's Behavior Problems: A Comparison of Adopted and Biological Children *Social Forces*, *86*(3), 1139-1161.
- Amato, P. R., & Keith, B. (1991). Parental Divorce and the Well-Being of Children: A Meta-Analysis. *Psychological Bulletin*, *110*(1), 26-46.
- Anderson, S. R., Anderson, S. A., Palmer, K. L., Mutchler, M. S., & Baker, L. K. (2010). Defining High Conflict. *The American Journal of Family Therapy*, *39*(1), 11-27. doi: 10.1080/01926187.2010.530194
- Bask, M. (2015). Externalising and internalising problem behaviour among Swedish adolescent boys and girls *Journal of Social Welfare*, *24*, 182-192. doi:10.1111/ijsw.12106Int
- Benson, M. J., Buehler, C., & Gerard, J. M. (2008). Interparental hostility and early adolescent problem behavior: Spillover via maternal acceptance, harshness, inconsistency, and intrusiveness. *Journal of Early Adolescence*, *4*, 428-454.
- Birnbaum, R., & Bala, N. (2010). Toward the Differentiation of High-Conflict Families: An Analysis of Social Science Research And Canadian Case Law. *Family Court Review* *48*(3), 403-416.



- Bland, J. M., & Altman, G. D. (1997). Cronbach's Alpha. *British Medical Journal*, 314(7080), 572.
- Block, J. H., Block, J., & Morrison, A. (1981). Parental Agreement-Disagreement on Child-Rearing Orientations and Gender-Related Personality Correlates in Children *Child Development*, 52(3), 965-974.
- Borren, I., & Helland, I. S. (2013). *Intervensjoner for å dempe foreldrekonflikt - en kunnskapsoversikt* (2013:6). Retrieved from fhi.no
- Bowen, M. (1993). *Family therapy in clinical practice*. New York: Jason Aronson.
- Bradford, K., & Barber, B. K. (2005). Implications of parent-child boundary dissolution In P. K. Kerig (Ed.), *Implications of parent-child boundary dissolution for developmental psychopathology: Who is the parent and who is the child?* (pp. 144-165). New York: Haworth.
- Breidablikk, H. J., & Meland, E. (1999). Familieoppløsning i barndom – helse og helseatferd i ungdommen. *Tidsskrift for Den norske lægeforening*, 119, 2331–2335.
- Breivik, K., & Olweus, D. A. N. (2006). Children of divorce in a Scandinavian welfare state: Are they less affected than US children? *Scandinavian Journal of Psychology*, 47(1), 61-74. doi:10.1111/j.1467-9450.2006.00493.x
- Buehler, C., Anthony, C., Krishnakumar, A., Stone, G., Gerard, J., & Pemberton, S. (1997). Interparental Conflict and Youth Problem Behaviors: A Meta-Analysis. *Journal of Child and Family Studies*, 6(2), 233-247. doi:10.1023/a:1025006909538
- Buehler, C., & Gerard, J. M. (2002). Marital Conflict, Ineffective Parenting, and Children's and Adolescents' Maladjustment. *Journal of Marriage and Family*, 64, 78-92.
- Buehler, C., Krishnakumar, A., Stone, G., Anthony, C., Pemberton, S., Gerard, J., & Barber, B. K. (1998). Interparental Conflict Styles and Youth Problem Behaviors: A Two-Sample Replication Study. *Journal of Marriage and Family*, 60(1), 119-132. doi:10.2307/353446
- Byrne, B. M. (2012). *Structural equation modeling with Mplus, Basic Concepts, Applications, and Programming*. New York: Routledge.
- Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental Socialization of Emotion Expression: Gender Differences and Relations to Child Adjustment. *Emotion*, 5(1), 80-88.
- Chaplin, W. F. (1991). The next generation of moderator research in personality psychology. *Journal of Personality*, 59(2), 143-178. doi:0.1111/j.1467-6494.1991.tb00772.x

- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling, 14*, 464-504.
- Cho, H. (2012). Racial differences in the prevalence of intimate partner violence against women and associated factors. *Journal of Interpersonal Violence, 27*(2), 344-363.
- Chung, G. H., Flook, L., & Fuligni, A. J. (2009). Daily family conflict and emotional distress among adolescents from Latin American, Asian, and European backgrounds. *Development and Psychology, 45*, 1406-1415.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale: Lawrence Erlbaum Associates.
- Cohen, P. (1984). Violence in the Family - An Act of Loyalty? *Psychotherapy, 21*(249-253).
- Collishaw, S., Goodman, R., Ford, T., Rabe-Hesketh, S., & Pickles, A. (2009). How far are associations between child, family and community factors and child psychopathology informant-specific and informant-general? *Journal of Child Psychology and Psychiatry, 50*(5), 571-580. doi:10.1111/j.1469-7610.2008.02026.x
- Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archive of General Psychiatry, 60*(8), 837-844.
- Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*, 243-267.
- Cui, M., Conger, R. D., & Lorenz, F. O. (2005). Predicting change in adolescent adjustment from change in marital problems. *Developmental Psychology, 41*, 812- 823.
- Cummings, E. M., & Davies, P. T. (1994). *Children and marital conflict: The impact of family dispute and resolution*: Guilford Press.
- Cummings, E. M., & Davies, P. T. (2010). *Marital conflict and children. An emotional security perspective*. New York: The Guilford Press.
- Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2004). Everyday marital conflict and child aggression. *Journal of Abnormal Child Psychology, 32*, 191-202.
- Cummings, E. M., Schermerhorn, A. C., Davies, P. T., Goeke-Morey, M. C., & Cummings, J. S. (2006). Interparental discord and child adjustment: Prospective investigations of emotional security as an explanatory mechanism. *Child Development, 77*, 132-152.
- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to expressions of anger and affection by others in the family. *Child Development, 52*, 1274-1282.

- Davies, P. T., & Cummings, E. M. (1994). Marital Conflict and Child Adjustment: An Emotional Security Hypothesis. *Psychological Bulletin*, *116*(3), 387-411.
- 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*, 124-139.
- Davies, P. T., Harold, G. T., Goeke-Morey, M. C., & Cummings, E. M. (2002). Child Emotional Security and Interparental Conflict. . *Monographs of the Society for Research in Child Development*, *67*(3), 1-131.
- Davies, P. T., Hops, H., Aipert, A., & Sheeber, L. (1998). Child responses to parental conflict and their effect on adjustment: A study of triadic relations. *Journal of Family Psychology*, *12*, 163-177.
- Davies, P. T., & Lindsay, L. L. (2001). Does gender moderate the effects of marital conflict on children. In J. H. Grych & F. D. Fincham (Eds.), *Interparental conflict and child development: Theory, research, and applications* (pp. 64-97). Cambridge: Cambridge University Press.
- Davies, P. T., Myers, R. L., Cummings, E. M., & Heindel, S. (1999). Adult conflict history and children's subsequent responses to conflict: An experimental test. . *Journal of Family Psychology*, *13*, 610-628.
- De Bellis, M. D. (2001). Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment, and policy. . *Development and Psychopathology*, *13*, 539-564.
- Dempster, A. P., Laird, N. M., & Rubin, D. B. (1977). Maximum Likelihood from Incomplete Data via the EM Algorithm. *Journal of the Royal Statistical Society*, *39*(1), 1-38.
- DeVellis, R. (2012). *Scale development: theory and applications: theory and application*. . CA: Thousand Okas.
- Duke, N., Ireland, M., & Borowsky, I. W. (2005). Identifying psychosocial problems among youth: factors associated with youth agreement on a positive parent-completed PSC-17. *Child Care Health Development*, *31*, 563-573. doi:j.1365-2214.2005.00551.x
- Edelbrock, C., Costello, A. J., Dulcan, M. K., Conover, N. C., & Kala, R. (1986). Parent-child agreement on child psychiatric symptoms assessed via structured interview. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *27*, 181-190.
- Ekeland, T.-J. (2004). *Konflikt of konfliktforståelse: for helse- og sosialarbeidere*. Gyldendal akademisk.

- El-Sheikh, M., Kouros, C. D., Erath, S. A., Cummings, E. M., Keller, P. S., & Staton, L. (2009). Marital conflict and children's externalizing behavior: Interactions between parasympathetic and sympathetic nervous system activity. *Monographs of the Society for Research in Child Development, 74*(231).
- Emery, R. E. (1982). Interparental conflict and the children of discord and divorce. *Psychological Bulletin, 92*, 310-330.
- Emery, R. E. (1999). *Marriage, divorce, and children's adjustment* (2 Ed.). Thousand Oaks, CA: Sage Publications.
- Emery, R. E., & O'Leary, K. D. (1982). Children's perceptions of marital discord and behavior problems of boys and girls. *Journal of Abnormal Child Psychology, 10*, 11-24.
- Emery, R. E., & O'Leary, K. D. (1984). Marital discord and child behavior problems in a nonclinic sample. *Journal of Abnormal Child Psychology, 12*, 411-420.
- Engfer, A. (1988). The interrelatedness of marriage and the mother-child relationship. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 104-118). Oxford, UK: Clarendon.
- Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*, 108-132.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes, 36*(3), 305-323. doi:10.1016/0749-5978(85)90002-0
- Falnes-Dalheim, A., & Dybendal, K. (2016). Families and households, 1 January 2016. Retrieved from <https://www.ssb.no/en/befolkning/statistikker/familie>
- Fauber, R., Forehand, R., Thomas, A. M., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent adjustment in intact and divorced families: The role of disrupted parenting. *Child Development, 61*, 1112-1123.
- Feinberg, M., Neiderhiser, J. M., Reiss, D., Hetherington, E. M., & Simmens, S. (2000). Sibling comparison of differential parental treatment in adolescence: Gender, self-esteem, and emotionality as mediators of the parenting-adjustment association. *Child Development, 71*(1611-1628).
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics*. London: SAGE Publications Ltd.
- Fisher, R. A. (1925). *Statistical methods for research workers*. Edinburgh: Oliver and Boyd.

- Franck, K. L., & Buehler, C. (2007). A family process model of marital hostility, parental depressive affect, and early adolescent problem behavior: The roles of triangulation and parental warmth. *Journal of Family Psychology, 21*, 614-625.
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*, 578-594.
- Goeke-Morey, M. C., Cummings, E. M., Harold, G. T., & Shelton, K. H. (2013). Categories and continua of destructive and constructive marital conflict tactics from the perspective of U.S. and Welsh children. *Journal of Family Psychology, 17*, 327-338.
- Goodman, A., Lamping, D. L., & Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *Journal of Abnormal Child Psychology, 38*, 1179-1191.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 38*, 581-586.
- Gottman, J. M., & Katz, L. F. (1989). Effects of marital discord on young children's peer interaction and health. *Developmental Psychology, 25*(3), 373.
- Gottman, J. M., & Silver, N. (1999). *The seven principles for making marriage work: A practical guide from the country's foremost relationship expert*. New York: Three Rivers Press.
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin, 108*, 267-290.
- Grych, J. H., & Fincham, F. D. (2001). Interparental Conflict and Child Adjustment. In J. H. Grych & F. D. Fincham (Eds.), *Interparental Conflict and Child Development: Theory, Research, and Applications*. New York: Cambridge University Press.
- Grych, J. H., Raynor, S., & Fosco, G. (2004). Family processes that shape the impact of interparental conflict on adolescents. *Development and Psychopathology, 16*(3), 649-665. doi:10.1017/S0954579404004717
- Guion, K., Mrug, S., & Windle, M. (2009). Predictive value of informant discrepancies in reports of parenting: Relations to early adolescents' adjustment. *Journal of Abnormal Child Psychology, 37*(17-30). doi:10.1007/s10802-008-9253-5
- Gustavson, K., van Saest, T., Karevold, E., & Røysamb, E. (2012). Attrition and generalizability in longitudinal studies: findings from a 15-year population-based study and a Monte Carlo simulation study. *BMC Public Health, 12*(1), 918.

- Hægeland, T. (2015). Dette er Norge 2015: Hva tallene forteller. Retrieved from [https://www.ssb.no/befolkning/artikler-og-publikasjoner/\\_attachment/234757?\\_ts=14f3afded20](https://www.ssb.no/befolkning/artikler-og-publikasjoner/_attachment/234757?_ts=14f3afded20)
- Hansagi, H., Brandt, L., & Andreasson, S. (2000). Parental divorce: psychosocial well-being, mental health and mortality during youth and young adulthood: A longitudinal study of Swedish conscripts. *European Journal of Public Health, 10*(2), 86–92.
- Harold, G. T., Aitken, J. J., & Shelton, K. H. (2007). Inter-parental conflict and children's academic attainment: A longitudinal analysis. *Journal of Child Psychology and Psychiatry, 48*, 1223-1232.
- Heinrichs, N., Cronrath, A., L., Degon, M., & Snyder, D., K. . (2010). The link between child emotional and behavioural problems and couple functioning. *Family Science, 1*, 152-172.
- Heyerdahl, S. (2003). SDQ – Strength and Difficulties Questionnaire: En orientering om et nytt spørreskjema for kartlegging av mental helse hos barn og unge, brukt i UNGHUBRO, OPPHED og TROFINN. *Norsk Epidemiologi, 13*(1), 127-135.
- Holm, S. F. (2016). Nybakte foreldre med samlivsproblemer får ikke hjelpen de trenger. Retrieved from <https://psykologisk.no/2016/09/nybakte-foreldre-med-samlivsproblemer-far-ikke-hjelpen-de-trenger/>
- Holøien, A. M., Zachrisen, O. O., & Holseter, A. M. R. (2016). Befolkningens utdanningsnivå. Retrieved from <http://www.ssb.no/utniv>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.
- Ingoldsby, E. M., Kohl, G. O., McMahon, R. J., & Lengua, L. (2006). Conduct problems, depressive symptomatology and their co-occurring presentation in childhood as predictors of adjustment in early adolescence. *Journal of Abnormal Child Psychology, 34*, 603-621.
- Jacobson, D. S. (1978). The impact of marital separation/divorce on children: II. Interparental hostility and child adjustment. *Journal of Divorce, 2*, 3-19.
- Jenkins, J. M., & Smith, M. A. (1991). Marital disharmony and children's behaviour problems: aspects of a poor marriage that affect children adversely. *Journal of Child Psychology and Psychiatry, 32*(5), 793-810.
- Jenkins, J. M., Smith, M. A., & Graham, P. J. (1989). Coping with parental quarrels. *Journal of the American Academy of Child & Adolescent Psychiatry, 28*(2), 182-189.

- Johnson, P. L., & O'Leary, K. D. (1987). Parental behavior patterns and conduct disorders in girls. *Journal of Abnormal Child Psychology*, *15*, 573-581.
- Johnston, J. R., Gonzalez, R., & Campbell, L. E. (1987). Ongoing post-divorce conflict and child disturbance. *Journal of Abnormal Child Psychology*, *15*, 497-509.
- Jouriles, E. N., Murphy, C. M., & O'Leary, K. D. (1989). Interspousal aggression, marital discord, and child problems. *Journal of Consulting and Clinical Psychology*, *57*(3), 453-455.
- Kadzin, A. (1988). The diagnosis of childhood disorders: Assessment issues and strategies. *Behavioral Assessment*, *10*, 67-94.
- Katz, L. F., & Gottman, J. M. (1996). Spillover effects of marital conflict: In search of parenting and coparenting mechanisms. *New Directions for Child and Adolescent Development*, 57-76.
- Kelly, J. B. (2000). Children's Adjustment in Conflicted Marriage and Divorce: A Decade Review of Research. *Journal of the American Academy of Child & Adolescent Psychiatry*, *39*(8), 963-973. doi:10.1097/00004583-200008000-00007
- Kerig, P. K. (1996). Assessing the links between interparental conflict and child adjustment: The Conflicts and Problems Solving Scales. *Journal of Family Psychology*, *10*, 454-473.
- Kerig, P. K. (1998). Gender and appraisals as mediators of adjustment in children exposed to interparental violence. *Journal of Family Violence*, *13*, 345-363.
- Kim-Cohen, J., Arseneault, L., Caspi, A., Tomas, M. P., Taylor, A., & Moffitt, T. (2005). Validity of DSM-IV conduct disorder in 4.5-5 year-old children: A longitudinal epidemiological study. *American Journal of Psychiatry*, *162*(6), 1108-1117.
- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: a meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*(2), 339-352.
- Knoester, C., & Afifi, T. A. (2001). Reviewing Couples in Conflict. In A. Booth, A. C. Crouter, M. L. Clements, & T. Boone-Holladay (Eds.), *Couples in Conflict: Classic Edition*: Routledge.
- Kraemer, H. C., Measelle, J. R., Ablow, J. C., Essex, M. J., Boyce, W., & Kupfer, D. J. (2003). A new approach to integrating data from multiple informants in psychiatric assessment and research: Mixing and matching contexts and perspectives. *American Journal of Psychiatry*, *160*(1), 1566-1577. doi:10.1176/appi.ajp.160.9.1566

- Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviors: A meta-analytic review. *Family Relations*, 49, 25-44.
- Kunnskapsdepartementet. (1999). Lov om grunnskolen og den vidaregåande opplæringa (opplæringslova). Retrieved from <http://www.lovdatab.no/all/nl->
- Kunnskapsdepartementet. (2006). Lov om barnehager. Retrieved from <http://www.lovdatab.no/all/hl-20050617-064.html>
- Lansford, J. E. (2009). Parental divorce and children's adjustment. *Perspectives on psychological science*, 4, 140-152.
- Larsen, A. K., & Slåtten, M. V. (2010). *En bok om oppvekst*. Bergen: Fagbokforlaget.
- Lewinsohn, P. M., Hops, H., Roberts, R. E., Steeley, J. R., & Andrews, J. A. (1993). Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *Journal of Abnormal Psychology*, 102(1), 133-144.
- Lewis, C. E., Siegel, J. M., & Lewis, M. A. (1984). Feeling bad: Exploring sources of distress among pre-adolescent children. *American Journal of Public Health*, 74, 117-122.
- Loehlin, J. C. (1998). *Latent variable models: an introduction to factor, path, and structural analyses* London: Lawrence Erlbaum Associates.
- Long, N., Slater, E., Forehand, R., & Fauber, R. (1988). Continued high or reduced interparental conflict following divorce: Relations to young adolescent adjustment. *Journal of Consulting and Clinical Psychology*, 56, 467-469.
- Lunde, H., & Bye, K. S. (2016). Lønn, alle ansatte. Retrieved from <https://www.ssb.no/arbeid-og-lonn/statistikker/lonnansatt/aar/2016-03-03>
- Machenbach, J. P., Lingsma, H. F., van Ravenswaay, N. T., & Kamphuis, C. B. M. (2012). The population and high-risk approaches to prevention: quantitative estimates of their contribution to population health in the Netherlands. *European Journal of Public Health*, 23(6), 1-7. doi:10.1093/eurpub/ckr186
- Malik, K. (2014). *Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. New York: United Nations Development Programme.
- Margolin, G., Oliver, P., H., & Medina, A. M. (2001). Conceptual Issues in Understanding the Relation between Interparental Conflict and Child Adjustment: Integrating Developmental Psychopathology and Risk/Resilience Perspectives. In J. H. Grych &



- F. D. Fincham (Eds.), *Interparental Conflict and Child Development: Theory, Research, and Applications*. New York: Cambridge University Press.
- McDonald, R., & Grych, J. H. (2006). Young children's appraisals of interparental conflict: Measurement and links with adjustment problems. *Journal of Family Psychology, 20*, 89-99. doi:10.1037/0893-3200.20.1.88
- McLoyd, V. C., Harper, C. I., & Copeland, N. L. (2001). Ethnic minority status, interparental conflict, and child adjustment. In F. D. Fincham & J. H. Grych (Eds.), *Interparental conflict and child development: Theory, research and application* (pp. 98-125). Cambridge, UK: Cambridge University Press.
- Minuchin, P. (1985). Families and individual development: Provocations from the field of family therapy. *Child Development, 56*, 289-302.
- Minuchin, S. (1974). *Families and family therapy*: Harvard University Press.
- Moxnes, K., Haugen, G. M. D., & Holter, T. (1999). *Skilsmisens virkning på barn. Foreldres oppfatning av skilsmisens konsekvenser for deres barn*. Retrieved from Trondheim:
- Mykletun, A., Knudsen, A. K., & Mathiesen, K. S. (2009). *Psykiske lidelser i Norge: Et folkehelseperspektiv*. Retrieved from <https://www.fhi.no/globalassets/migrering/dokumenter/pdf/rapport-20098-pdf-pdf>
- Nævdal, F., & Thuen, F. (2004). Residence arrangements and well-being: a study of Norwegian adolescents. *Scandinavian Journal of Psychology, 45*, 363-371.
- Najman, J. M., Williams, G. G., Nikles, J., & Shuttlewood, G. J. (2001). Bias influencing maternal reports of child behavior and emotional state. *Social Psychiatry and Psychiatric Epidemiology 36*(4), 186-194.
- Najman, J. M., Williams, G. M., Nikles, J., Spence, S., Bor, W., O'Callaghan, M., . . . Andersen, M. J. (2000). Mothers' mental illness and child behavior problems: cause-effect association or observation bias? . *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(5), 592-602.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Öberg, B., & Öberg, G. (1987). *Skiljas, men inte frå barnen*. Båras: Natur och Kultur.
- Oerbeck, B., Overgaard, K. R., Aspenes, S. T., Pripp, A. H., Mordre, M., Aase, H., & Zeiner, P. (2017). ADHD, comorbid disorders and psychosocial functioning: How representative is a child cohort study? Findings from a national patient registry. *BMC Psychiatry, 17*(23). doi:10.1186/s12888-017-1204-7

- Oltmanns, T. F., Broderick, J. E., & O'Leary, K. D. (1977). Marital adjustment and the efficacy of behavior therapy with children. *Journal of Consulting and Clinical Psychology*, *45*, 724-729. .
- Pelton, J., Steele, R. G., W., C. M., & Forehand, R. (2001). Discrepancy between Mother and Child Perceptions of Their Relationship: II. Consequences for Children Considered within the Context of Maternal Physical Illness. *Journal of Family Violence*, *16*(1), 17-35. doi:10.1023/A:1026572325078
- Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and the Family*, *48*, 295-307.
- Polier, G. G., Vloet, T. D., Herpertz-Dahlmann, B., Laurens, K. R., & Hodgins, S. (2012). Comorbidity of conduct disorder symptoms and internalising problems in children: investigating a community and a clinical sample. *European Child & Adolescent Psychiatry*, *21*(1), 31-38. doi:10.1007/s00787-011-0229-6
- Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems. *Journal of Abnormal Child Psychology*, *8*, 287-295.
- Reidler, E. B., & Swenson, L. P. (2012). Discrepancies between youth and mothers' perceptions of their mother-child relationship quality and self-disclosure: implications for youth- and mother-reported youth adjustment. *Journal of Youth and Adolescence*, *41*, 1151-1167.
- Reyes, A. D. L., & Kazdin, A. E. (2005). Informant Discrepancies in the Assessment of Childhood Psychopathology: A Critical Review, Theoretical Framework, and Recommendations for Further Study. *Psychological Bulletin*, *131*(4), 483-509. doi:<http://dx.doi.org/10.1037/0033-2909.131.4.483>
- Rød, R. A. (2010). Konfliktfylt barnefordeling – arena for barnevernet? *Fokus på Familien*, *02*, 93-115.
- Rønning, J. A., Handegaard, B. H., Sourander, A., & Mørch, W. T. (2004). The Strengths and Difficulties Self-Report Questionnaire as a screening instrument in Norwegian community samples. *European Child & Adolescent Psychiatry*, *13*, 73-82. doi:10.1007/s00787-004-0356-4
- Rose, G. (1993). *The strategy of preventive medicine*. Oxford, UK: Oxford University Press.
- Rutter, M. (1967). A children's behaviour questionnaire for completion by teachers: preliminary findings. *Journal of Child Psychology and Psychiatry*, *8*, 1-11.
- Rutter, M. (1971). Parent-child separation: Psychological effects on the children. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *12*, 233-260.

- Sargisson, R. J., Stanley, P. G., & Hayward, A. (2016). Multi-informant scores and gender differences on the Strengths and Difficulties Questionnaire for New Zealand children. *New Zealand Journal of Psychology, 45*(2), 4-12.
- Shelton, K. H., & Harold, G. T. (2008). Pathways between interparental conflict and adolescent psychological adjustment: Bridging links through children's cognitive appraisals and coping strategies. *Journal of Early Adolescence, 28*, 555-582.
- Smedje, H., Broman, J. E., Hetta, J., & von Knorring, A. L. (1999). Psychometric properties of a Swedish version of the "Strengths and Difficulties Questionnaire. *European Child and Adolescent Psychiatry, 8*(2), 63-70.
- Sroufe, A. (1988). The role of infant-caregiver attachment in development. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 18-38). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Steenkamp, J. B. E. M., & Baumgartner, H. (1998). Assessing Measurement Invariance in Cross-National Consumer Research. *Journal of Consumer Research, 25*(1), 78-90.
- Stone, L. L., Otten, R., Engels, R. R. C. M., Vermulst, A. A., & Janssens, J. M. A. M. (2010). Psychometric Properties of the Parent and Teacher Versions of the Strengths and Difficulties Questionnaire for 4- to 12-Year-Olds: A Review. *Clinical Child and Family Psychology Review, 13*(3), 254-274.
- Størksen, I., Røysamb, E., Holmen, T. L., & Tambs, K. (2006). Adolescent adjustment and well-being: Effects of parental divorce and distress. *Scandinavian Journal of Psychology, 47*(1), 75-84. doi:10.1111/j.1467-9450.2006.00494.x
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston: Pearson Education.
- Thuen, F. (2002). Ekteskapskonflikter og barn. *Bergens Tidende*. Retrieved from [http://www.bt.no/btmeninger/kronikk/Ekteskapskonflikter-og-barn-34968b.html?spid\\_rel=2](http://www.bt.no/btmeninger/kronikk/Ekteskapskonflikter-og-barn-34968b.html?spid_rel=2)
- Towers, H., Spotts, E. L., & Neiderhiser, J. M. (2001). Genetic and Environmental Influences on Parenting and Marital Relationships; Current Findings and Future Directions. *Marriage and Family Review, 33*(1), 11-20.
- Unger, D. G., Brown, M. B., Tressell, P. A., & McLeod, L. E. (2000). Interparental Conflict and Adolescent Depressed Mood: The Role of Family Functioning. *Child Psychiatry and Human Development*. doi:10.1023/A:1001922004459

- Van der Meer, M., Dixon, A., & Rose, D. (2008). Parent and child agreement on reports of problem behaviour obtained from a screening questionnaire, the SDQ. *European Child & Adolescent Psychiatry, 17*(8), 491-497.
- Verhulst, F. C., & van der Ende, J. (1992). Agreement between parents' reports and adolescents' self-reports of problem behavior. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 33*, 1011-1023. doi:j.1469-7610.1992.tb00922.x
- Vogel, E. F., & Bell, N. W. (1960). The emotionally disturbed child as the family scapegoat. In N. W. Bell & E. F. Vogel (Eds.), *A modern introduction to the family* (pp. 382-397). Glencoe, IL: Free Press.
- Wallerstein, J. S., Lewis, J., & Blakeslee, S. (2000). *The unexpected legacy of divorce: A twenty-five years landmark study*. New York: Hyperion.
- Wang, M. V., Engvik, M., Evensen, L., Gustavson, K., Jin, F., Johansen, R., . . . Aase, H. (2014). *Sammenhenger mellom barnehagekvalitet og barns fungering ved 5 år*. Retrieved from
- Weeks, G., & Treat, S. (2001). *Couples in Treatment* (2 ed.): Psychology Press.
- Whitehead, L. (1979). Sex differences in children's responses to family stress: A reevaluation. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 20*, 247-254.
- Wierson, M., Forehand, R., & McCombs, A. (1988). The relationship of early adolescent functioning to parent-reported and adolescent-perceived interparental conflict. *Journal of Abnormal Child Psychology, 16*, 707-718.
- Wolkind, S., & Rutter, M. (1973). Children who have been "in care" - An epidemiological study. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 14*, 97-105.
- Zahn-Waxler, C. (1993). Warriors and worriers: Gender and psychopathology. *Development and Psychopathology, 5*, 79-89.
- Zahn-Waxler, C., Shirtcliff, E. A., & Marceau, K. (2008). Disorders of childhood and adolescence: gender and psychopathology. *Annual Review of Clinical Psychology, 4*, 275-303.
- 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.
- Zimet, D. M., & Jacob, T. (2001). Influences of marital conflict on child adjustment: Review of theory and research. *Clinical Child and Family Psychology Review, 4*, 319 – 335.



# Appendices

## Appendix A: Full list of CPS, conflict strategies

*Full list of questions constituting CPS conflict strategies*

---

	0	1	2	3
	Aldri	Sjelden	Noen ganger	Ofte

---

### **Hvilke strategier bruker du og barnets mor/far når dere har uenigheter med hverandre?**

1. Snakker ut med den andre
2. Uttrykker tanker og følelser åpenlyst
3. Lytter til den andres synspunkt
4. Prøver å forstå hva den andre virkelig føler
5. Prøver å snakke fornuftig med den andre
6. Prøver å finne en løsning som møter begge behov
7. Oppsøker hjelp fra en rådgiver eller en venn
8. Kompromisser, møter den andre på halvveien
9. Prøver å glatte over ting
10. Gir etter for den andres synspunkt for å unnslippe diskusjoner
11. Tar på seg skylden, beklager
12. "Avfinner seg", fleiper, føyer seg etter den andre
13. Prøver å ignorere problemet, unngår å snakke om det
14. Endrer emnet
15. Holder inne følelser
16. Forlater rommet
17. Stormer ut av huset
18. Gråter
19. Sutrer, nekter å snakke, "tier i hjel"

20. Klager, småkrangler uten egentlig å komme videre
21. Verver venner eller familie til å støtte eget synspunkt
22. Blir sint på barnet når man i virkeligheten er sint på den andre
23. Krangler foran barnet
24. Involverer barnet i vår krangel
25. Krangler når barnet muligens kan overhøre
26. Betror seg til barnet om problemer med den andre
27. Insisterer på sitt eget synspunkt
28. Prøver å overbevise den andre om sin egen måte å tenke på
29. Hever stemmen, hylar, roper
30. Avbryter/lytter ikke til den andre
31. Er sarkastisk
32. Anklager
33. Skjeller ut, banner, fornærmer
34. Sier eller gjør noe for å såre den andres følelser
35. Truer med å såre den andre
36. Trekker tilbake kjærlighet eller hengivenhet
37. Kaster gjenstander, smeller dører, ødelegger ting
38. Kaster noe på den andre
39. Truer med å såre den andre
40. Dytter, drar, skubber, griper, er hardhendt mot den andre
41. Dasker den andre
42. Slår, sparkar, biter den andre
43. Slår den andre hardt
44. Skader seg selv

---

*Note.* Reported with permission.

## Appendix B: Internal consistencies, factor loadings, and correlations for CPS, short scale

Table B1

*Internal consistency reliability of the mother and father report of the CPS conflict strategies analysed with Cronbach's coefficient alpha*

Variable	Mother		Father	
	N	A	N	$\alpha$
Cooperation	350	.69	352	.78
Avoidance	358	.77	349	.76
Child Involvement	362	.71	344	.73
Verbal Aggression	356	.74	347	.73

Table B2

*Multigroup confirmatory factor analysis with factor loadings for the modified conflict strategies model*

	Mothers	Fathers
<b>Cooperation</b>		
Lytter til den andres synspunkt	.764	.815
Prøver å forstå hva den andre virkelig føler	.852	.855
Prøver å snakke fornuftig med den andre	.536	.712
Prøver å finne en løsning som møter begge behov	.736	.787
<b>Avoidance</b>		
Prøver å glatte over ting	.670	.617
Gir etter for den andres synspunkt for å unnsnippe diskusjoner	.630	.691
Prøver å ignorere problemet, unngår å snakke om det	.865	.884
Holder inne følelser	.748	.707
<b>Child Involvement</b>		
Krangler foran barnet	.922	.915
Involverer barnet i vår krangel	.687	.726
Krangler når barnet muligens kan overheøre	.903	.934
Betror seg til barnet om problemer med den andre	.545	.631
<b>Verbal Aggression</b>		
Insisterer på sitt eget synspunkt	.841	.763
Prøver å overbevise den andre om sin egen måte å tenke på	.805	.718
Er sarkastisk	.634	.622



Anklager	.705	.758
----------	------	------

Table B3

*Correlation matrix of standardised correlations between the revised four-factor model.*

	1	2	3	4
1. Cooperation	1			
2. Avoidance	-.22*	1		
3. Child Involvement	-.38*	-.08	1	
4. Verbal aggression	-.33*	.11	.58*	1

*Note.* \* $p < .05$ .

## Appendix C: Descriptive statistics for CPS, short scale

Table C1

### *Descriptive Statistics for the Revised Questionnaire Measures of CPS Conflict Strategies*

Subscale	Item	Mothers		Fathers	
		Mean	SD	Mean	SD
Cooperation	Lytter til den andres synspunkt	2,63	0,512	2,69	0,487
	Prøver å forstå hva den andre virkelig føler	2,52	0,568	2,54	0,558
	Prøver å snakke fornuftig med den andre	2,66	0,541	2,61	0,584
	Prøver å finne en løsning som møter begge behov	2,67	0,495	2,66	0,509
Avoidance	Prøver å glatte over ting	1,26	0,823	1,44	0,85
	Gir etter for den andres synspunkt for å unnsnippe diskusjoner	1,37	0,78	1,78	0,746
	Prøver å ignorere problemet, unngår å snakke om det	1,32	0,806	1,45	0,836
	Holder inne følelser	1,44	0,847	1,78	0,811
Child involvement	Krangler foran barnet	1	0,739	0,85	0,72
	Involverer barnet i vår krangel	0,18	0,414	0,17	0,391
	Krangler når barnet muligens kan overhøre	1,05	0,722	0,92	0,722
	Betror seg til barnet om problemer med den andre	0,22	0,453	0,16	0,428
Verbal aggression	Insisterer på sitt eget synspunkt	1,6	0,828	1,29	0,835
	Prøver å overbevise den andre om sin egen måte å tenke på	1,83	0,784	1,63	0,869
	Er sarkastisk	1,12	0,816	1,03	0,783
	Anklager	1,13	0,82	0,84	0,718

*Note: Items are reported in Norwegian, as they were used in the questionnaire*