

## **Tilburg University**

## The impact of cessation or continuation of family violence on children

Lunnemann, M. K. M.; Luijk, M. P. C. M.; Van der Horst, F. C. P.; Jongerling, J.; Steketee, M.

Published in: Children and Youth Services Review

DOI:

10.1016/j.childyouth.2022.106565

Publication date: 2022

Document Version Publisher's PDF, also known as Version of record

Link to publication in Tilburg University Research Portal

Citation for published version (APA): Lunnemann, M. K. M., Luijk, M. P. C. M., Van der Horst, F. C. P., Jongerling, J., & Steketee, M. (2022). The impact of cessation or continuation of family violence on children. Children and Youth Services Review, 140, [106565]. https://doi.org/10.1016/j.childyouth.2022.106565

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
   You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 27. Oct. 2022

ELSEVIER

Contents lists available at ScienceDirect

## Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth





## The impact of cessation or continuation of family violence on children

M.K.M. Lünnemann a,b,\*, M.P.C.M. Luijk a, F.C.P. Van der Horst a, J. Jongerling and M. Steketee a,b

- <sup>a</sup> Erasmus University Rotterdam, PO Box 1738, 3000 DR Rotterdam, the Netherlands
- <sup>b</sup> Verwey-Jonker Institute, Kromme Nieuwegracht 6, 3512 HG Utrecht, The Netherlands
- <sup>c</sup> Tilburg University, PO Box 90153, 5000 LE Tilburg, the Netherlands

#### ARTICLE INFO

Keywords: Family violence Child maltreatment Continuation Cessation Posttraumatic stress Delinquent behavior

#### ABSTRACT

Children exposed to family violence are at risk for developing long-lasting problems. Family violence is a pervasive problem, however, studies comparing continuation with cessation of family violence are limited. Understanding the cessation or continuation of family violence on child development is a prerequisite to prevent enduring problems and develop interventions. This study compares posttraumatic stress and delinquent behavior of children aged between eight and eighteen years for whom severe violence continues to children for whom violence diminishes or ceases. Children (N = 162, 43% boys, mean age 12 years) and their parents reported to child protection services (CPS) with severe violence were included. Levels of family violence, posttraumatic stress and delinquent behavior were re-assessed after 18 months. Most families (74%) still experienced severe family violence at the second assessment despite involvement of CPS. Structural equation modelling was applied. In the group where violence diminished or stopped, delinquent behavior decreased. A decrease of posttraumatic stress only occurred when violence diminished but surprisingly no decrease was observed when violence stopped completely. The findings demonstrate that overall family violence is persistent. Differing paths can be discerned for delinquent behavior and posttraumatic stress, indicating different developmental and recovery pathways after cessation of family violence. Nonetheless, it is fair to state that specialized and long-term care is crucial.

## 1. Introduction

Family violence often has long-term consequences for children's mental and physical development (Infurna et al., 2016; Lindert et al., 2014). Family violence, defined here as both direct child maltreatment (child abuse and neglect) and indirect child maltreatment (witnessing intimate partner violence), rarely happens as a single incident, often reoccurs, and is a persistent problem for a subset of victims (Frias & Angel, 2007; Margolin et al., 2009). Although numerous studies reveal long-term internalizing and externalizing problems for children, the ways in which continuation or cessation of family violence affects these problems remain poorly understood. So far, studies conclude that children who are chronically exposed to maltreatment experience more deleterious adjustment problems than children who experience incidental abuse (Ethier et al., 2004b; Li & Godinet, 2014; Manly et al., 1994). In particular, information is limited on the impact of cessation of family violence as compared to decrease or persistence of family violence on child development.

Therefore, the aim of this longitudinal study is to compare

behavioral outcomes of children from families in which severe violence continues to families in which violence has decreased or ceased. This question is fundamental for professionals who support families exposed to family violence. Both professionals and researchers are hesitantly recognizing that in some families it is well-nigh impossible to stop the violence (Li & Godinet, 2014; Van Yperen et al., 2020; Yoon et al., 2018). Understanding the impact of cessation or continuation of family violence on child development is essential for the further development of interventions to prevent enduring problems.

# 1.1. Severity and chronicity of family violence on developmental outcomes of children

There is consistent evidence that children who experience family violence report numerous adverse consequences in all developmental domains, both during childhood and adulthood (Carr et al., 2020; Cicchetti, 2016; Holt et al., 2008; Kitzmann et al., 2003; Wolfe et al., 2003). The problems children experience due to family violence strengthen over time (Vu et al., 2016) and exacerbate as the violence continues for a

<sup>\*</sup> Corresponding author at: Erasmus University Rotterdam, PO Box 1738, 3000 DR Rotterdam, the Netherlands.

E-mail addresses: lunnemann@essb.eur.nl (M.K.M. Lünnemann), luijk@essb.eur.nl (M.P.C.M. Luijk), vanderhorst@essb.eur.nl (F.C.P. Van der Horst), j. jongerling@tilburguniversity.edu (J. Jongerling), msteketee@verwey-jonker.nl (M. Steketee).

longer period and the violence is more severe (Howell et al., 2016; Kennedy et al., 2009, 2010). Moreover, children exposed to severe violence show more behavior problems regardless of the frequency of the violence, whereas children exposed to moderate or low levels of violence only show more behavior problems when they were exposed more frequently (Manly et al., 1994). Family violence is also less likely to cease in families who are exposed to more severe and more frequent violence (Ethier et al., 2004a; Frias & Angel, 2007; Kuijpers et al., 2011; Walker et al., 2013). However, surprisingly little is known about the impact of decrease or cessation of family violence on the problems of children.

In the literature, several studies have investigated chronic child maltreatment compared to transient child maltreatment. These studies, focusing on children between birth and the age of twelve years, reveal that chronic child maltreatment, as compared to transient child abuse and neglect, is related to stronger and more consistent adjustment problems (Ethier et al., 2004b; Li & Godinet, 2014; Manly et al., 1994). This difference in adjustment problems is especially the case for children aged eight years and older, and becomes more pronounced over time. Furthermore, children who experience persisting maltreatment both during childhood and adolescence are more likely to develop behavioral and psychological problems, than children who experience maltreatment during adolescence only (Thornberry et al., 2001). On the other hand, Manly and colleagues (2001) compared children who experienced chronic maltreatment to children who experienced maltreatment limited to one developmental stage (infant, preschool, school-age). Children exposed to chronic maltreatment did not differ from children exposed to maltreatment limited to one developmental stage, with one exception; children who chronically experienced maltreatment until their preschool period reported the most externalizing problems compared to the infant limited and preschool limited groups. The above results are not conclusive and limited to a comparison of chronic to transient maltreatment. In addition, only direct maltreatment is investigated instead of both direct and indirect child maltreatment, although these often occur simultaneously (Holt et al., 2008). This leaves the effects of a comparison between the continuation, decrease and cessation of family violence on the well-being of children un(der)studied.

# 1.2. Influence of family violence on trauma symptoms and delinquent behavior of children

Within the field of family violence research, posttraumatic stress and delinquent behavior of children are important and well-studied consequences of family violence. In addition, the literature also indicates that being engaged in delinquent behavior or having traumatic stress during childhood or adolescence increases the risk of becoming a perpetrator or victim of violence later on and therefore maintain the intergenerational circle of violence (Burgess & Akers, 1966; Herrenkohl et al., 2007; Rossman, 1998; Wolfe et al., 2004). Therefore, the current study investigates both posttraumatic stress and delinquent behavior of children as developmental outcomes of family violence.

Children who experience posttraumatic stress have repeated memories and scary thoughts of traumatic events, avoid reminiscence, and experience over-arousal symptoms such as irritability, hypervigilance and sleeping problems (Margolin & Vickerman, 2011; Van der Kolk, 2000). Posttraumatic stress can continue throughout the lifespan and subsequently affects the lives of these (young) people (Gilbert et al., 2009). The existing literature has demonstrated that family violence is a potential precursor of posttraumatic stress in children (Margolin & Vickerman, 2011; Vickerman & Margolin, 2007). Moreover, an increase of family violence over time affects the post-traumatic stress children experience; these children also show an increase of post-traumatic stress over time (Mishra et al., 2018; Yoon et al., 2018).

Delinquent behavior refers to a wide range of law-breaking behaviors, such as vandalism and theft (Enzmann et al., 2017; Smith & Stern, 1997). Delinquent behavior can be measured in many different ways, for

example the seriousness of the crime, frequency of offences, or the variety of offences. The review of Sweeten (2012) concludes that variety scales are preferred to measure delinquent behavior. In the literature, it is well established that violent and delinquent behavior of young people is related to family violence (Braga et al., 2017; Doelman et al., 2021; Kerig & Becker, 2015; Park et al., 2012; Steketee et al., 2019). However, it is dependent of different aspects of family violence how deeply and pervasively young people are affected by family violence (Kerig & Becker, 2015). Important risk factors are the frequency and duration of family violence; children exposed to more family violence and for a longer period are engaged in more violent and delinquent behavior (Dijkstra et al., 2019; Kerig & Becker, 2015; Yoon et al., 2018).

Whereas some studies reveal age or sex differences for internalizing problems or externalizing problems of children who experience family violence (Evans et al., 2008: Lindert et al., 2014; Renner & Boel-Studt, 2013; Sternberg et al., 2006; Wolfe et al., 2003), other studies do not (Kouros et al., 2010; McFarlane et al., 2017; Sternberg et al., 2006).

## 1.3. Current study

Despite growing evidence about the long term-consequences of child maltreatment, little is known about the effect of cessation of family violence. This longitudinal study therefore aims to investigate the impact of continuation, decrease or cessation of family violence on internalizing and externalizing problems of children aged between eight and eighteen years. The uniqueness of this study is that it investigates the impact of a continuation or cessation of family violence including direct as well as indirect maltreatment, and with multi-informant data of family violence. The current study examines children whose families were reported to child protection services for severe family violence. Posttraumatic stress and delinquent behavior of children are compared for three groups; children who do not experience family violence anymore 1.5 years later (violence stopped), children who experience less (severe) violence 1.5 years later (violence diminished), and children who still experience frequent or severe family violence 1.5 years later (persisting violence). We hypothesize that children who still experience persisting family violence will experience more trauma symptoms and are engaged in more delinquent behavior than children for whom the violence has ceased, and also more than children for whom the violence has (seriously) decreased but not stopped. Sex and age differences will be taken into account.

#### 2. Method

## 2.1. Procedure and participants

Data were collected between 2016 and 2020 for the longitudinal study "Violence within the home and its impact on parents' and children's lives". Participants were families, with at least one child, who were reported for intimate partner violence (IPV) or child abuse and neglect (CAN) to an organization specialized in family violence in the Netherlands. Families were approached by telephone to explain the aim of the study and to make an appointment for the first home-visit. Families were only included when they could read and understand Dutch. During the home-visit informed consent was signed by parents and children aged 12 and older in which they also agreed to be contacted for follow-up measures. Both parents and children aged eight years and older could participate and completed self-report questionnaires. Parents were compensated for their time with €20 for each participation and children with  $\ensuremath{\epsilon} 10$ . This longitudinal study was approved by the Scientific and Ethical Review Board of the VU Amsterdam (VCWE-2016-217R1).

The current study used information of children aged between eight and eighteen years (and their parents) who participated at the first measurement (T0) and the 1.5 year follow-up (T1). The time interval between the two measurement occasions was on average 22 months (SD

= 3.52). At T0, 370 children from 276 families participated of which 185 children (from 147 families) also completed the questionnaires at T1. Attrition was due to unknown relocation (18%), the parent(s) participated but none of the children wanted to participate anymore (8%), or the whole family did not want to participate anymore (21%). Reasons for non-participation of families were: no time or not interested anymore (41%), too much going on in the home situation (22%), questionnaire was too difficult, heavy or long (15%), would like to leave the situation behind (10%) or unknown (10%). Families who participated at both timepoints (N = 147) did not differ from families who dropped out after the first assessment (N = 129) on parental age, employment, education, ethnicity, family income, family violence, and age, sex, trauma symptoms and delinquent behavior of children. At the first measurement, almost all families reported persisting violence (N = 130), eleven families reported decreased violence and six families reported that the violence has stopped. To be able to assess the effects of continuing, decreasing, or stopping the violence, the current study makes use of the families who reported severe family violence at T0. For an overview of attrition and exclusion of participants, see Fig. 1.

Our final sample consisted of 162 children. On average children (43% boys) were aged 12.23 years (SD=2.49). The age of parents who participated was measured categorically, with most parents aged between 35 and 44 years (53%), or between 45 and 54 years (30%). Furthermore, 40 per cent of the parents who participated had a migration background. About half of the parents had a paid job and most families had a monthly household income at social assistance level (48%) or an average income (39%).

#### 2.2. Materials

## 2.2.1. Family violence

Family violence in the past year (assessed at T0) and family violence in the past six months (assessed at T1) were measured using the Dutch translation of the Revised Conflict Tactics Scale Parent Child for CAN

(CTSPC; Straus et al., 1998; Lamers-Winkelman et al., 2007), and the Revised Conflict Tactics Scale-2 for IPV (CTS2; Straus et al., 1996; Lamers-Winkelman et al., 2007).

Direct CAN. For direct CAN, children completed two subscales of the child version of the CTSPC. The first subscale consists of thirteen items about physical abuse ( $\alpha = 0.86$ , "my (step)mother/(step)father beat me up"), and the second subscale consists of four items about psychological abuse ( $\alpha = 0.80$ , "my (step)mother/(step)father yelled or screamed at me"). Parents report on their use of CAN with the parent version of the CTSPC, which consists of thirteen items about physical abuse ( $\alpha = 0.76$ , "slapped or kicked him/her"), five items about psychological abuse ( $\alpha =$ 0.77, "called him/her stupid or lazy") and five items about neglect ( $\alpha =$ 0.43, "were unable to feed your children"). Each subscale consists of moderate and severe incidents. Questions of both the child and parent versions of the CTSPC were filled out on an eight-point scale from 1 (never happened) to 8 (happened more than 20 times). These values are converted to 0 (never happened), 1 (once), 2 (twice), 4 (three to five incidents), 8 (six to ten incidents), 15 (eleven to twenty incidents) and 25 (more than 20 incidents). For each subscale of the CTSPC a total score was calculated by adding the scores for both parents and children separately

Indirect CAN: Witnessing IPV. Indirect CAN is measured as witnessing IPV from the child's perspective and as being a victim of perpetrator of IPV from the parent's perspective. Therefore, children completed the subscale about witnessing IPV of the child version of the CTSPC, which consists of six items about witnessing psychological IPV ( $\alpha=0.82$ , "my (step)mother/(step)father insulted or swore at the other") and nine items about witnessing physical IPV ( $\alpha=0.82$ , "my (step)mother/(step)father threw something at the other"). Parents completed the CTS2, which consists of twelve items about physical IPV ( $\alpha=0.93$ , "twisted arm or hair"), eight items about psychological IPV ( $\alpha=0.89$ , "shouted or yelled"), seven items about sexual IPV ( $\alpha=0.85$ , "used force to have sex") and six items about injury ( $\alpha=0.83$ , "had a sprain, bruise or small cut after a fight"). Each item of the CTS2 was

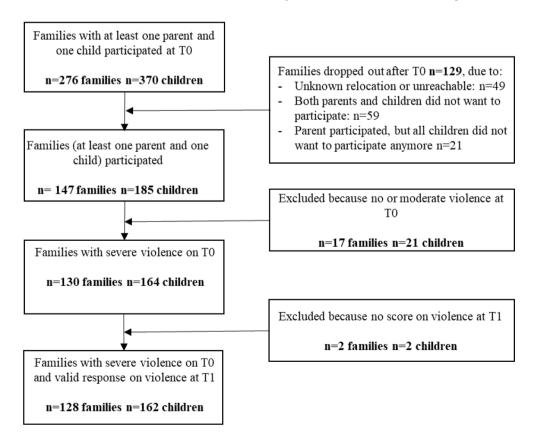


Fig. 1. Flowchart of the attrition and exclusion of participants.

filled out about the respondent's partner (e.g., "my (ex)partner damaged something of me") and about the respondent him- or herself (e.g., "I damaged something of my (ex)partner"). Each subscale consists of both moderate and serious incidents. Questions of both the CTSPC and CTS2 were filled out on the same eight-point scale as described for CAN (see above). For each subscale of the CTSPC a total score was calculated by adding the scores and for each subscale of the CTS2 a total score was calculated by adding the scores of both respondent and partner (Straus, 2006).

Classification of Family Violence. Families were classified into three groups based on the CTSPC and CTS2: 'family violence stopped', 'family violence diminished' and 'persisting family violence' (cf. Tierolf et al., 2014, Steketee et al., 2020). From the perspective of different reporters, we included multiple sources of information on family violence, namely from mothers, fathers, and children. Since we have information about both physical and psychological CAN and physical and psychological IPV from multiple sources (parents and children), and respondents are more likely to underreport than overreport (Langhinrichsen-Rohling & Vivian, 1994; Petersen et al., 2013), we will use the score of the family member who reported the highest number of incidents. Furthermore, although moderate psychological aggression is often not included as form of IPV, for example in the large-scale European study amongst 28 countries (FRA, 2014), we decided that also moderate psychological aggression should be seen as family violence if it happens more than just occasionally. We used two studies conducted among families that reflect the general Dutch population to decide which cut-off we should use for the frequency of moderate psychological IPV (Akkermans et al., 2020; Tierolf et al., 2014), Therefore, this classification of moderate psychological IPV is population-based. The study of Tierolf et al (2014) revealed that families in the general Dutch population reported on average four items of the CTS2 (e.g., storming out of the house, yelling) that are mild forms of IPV. The study of Akkermans et al (2020) revealed that almost half of the respondents reported (mild) verbal aggression, with more than 80 percent reporting that this happened less than four times. This shows that in an 'average' intimate relationship these behaviors also occasionally occur. Based on the two studies, we decided to set the cut-off on a maximum of three incidents and only of the four moderate items about psychological IPV of the CTS2. For the other forms of IPV and CAN we were more strict as we consider any form to be harmful. Therefore, a family was classified as 'family violence stopped' when all of the family members had reported 0 incidents of CAN and 0 incidents of IPV, with the exception that if a family reported less than four incidents of the moderate psychological items of the CTS2 this family was also classified as "family violence stopped'. Furthermore, when the highest score of IPV was at most 21 moderate incidents (with a minimum of 4 incidents for moderate psychological IPV and a minimum of 1 for the other forms of IPV), and the highest score of CAN was at most 2 moderate incidents and none of the family members had reported a serious incident of CAN or IPV this family was classified as 'family violence diminished'. Finally, when at least one of the family members had reported one or more serious incidents of CAN or IPV or more dan 21 incidents of moderate IPV or more dan 3 incidents of moderate CAN this family was classified as 'persisting family violence'. We used the groups based on the scores at T1 for our analysis, because at T0 all families experienced severe violence when reported to child protection services. It is expected that, due to this reporting, some families will experience much less family violence or no family violence at all anymore one and a half year later (T1).

## 2.2.2. Trauma symptoms of children

Trauma symptoms of children in the past month (assessed at both T0 and T1) were measured using the Dutch translation of the posttraumatic stress (PTS) scale of the Trauma Symptom Checklist for Children (TSCC; Briere, 1996; Lamers-Winkelman, 1998). The PTS scale consists of 10 items about intrusive thoughts, emotions, and painful memories (e.g., "remembering things that happened that I didn't like",  $\alpha=0.86$ ). Items

are filled out on a four-point scale (0 = never, 1 = sometimes, 2 = lots of times, 3 = almost all of the time) regarding the frequency of a symptom occurring in the past month. The TSCC also contains two validity scales (Briere, 1996). The first validity scale reflects the extent to which a child denies symptoms and consists of 10 items (e.g., "feeling sad or unhappy") that are unlikely to be scored with 0 (never). The second validity scale reflects the extent to which a child overrespond to symptoms and consists of 8 items (e.g., "feeling scared of men") that are unlikely to be scored with 3 (almost all of the time). Data were included when children scored valid on the two validity scales and had a maximum of 2 missing values on the PTS scale (Briere, 1996). First a raw score for the PTS scale was calculated by adding the scores, resulting in a range from 0 to 30. These raw scores were converted to T-scores based on children's sex and age (Briere, 1996).

## 2.2.3. Delinquent behavior of children

Delinquent behavior was measured at both T0 and T1 with a questionnaire that is used to measure delinquent behavior in the original National Youth Survey (Elliott et al., 1985) and the International Self Report study Delinquency (ISRD) project (Junger-Tas et al., 2012) and is validated (Zhang et al., 2000). At T0 we asked children about delinquent behavior in the past year and at T1 about the past six months. This measure consists of 4 questions about violent offenses (e.g., "beat up someone") and 4 questions about property offenses (e.g., "steal something from a store"). Each question is answered on a 2-point scale (0 = no, 1 = yes). Reliability of the questionnaire in the current study was satisfactory ( $\alpha = 0.69$ ). A total measure of delinquent behavior was created by adding the scores, resulting in a range from 0 to 8. The total score is a measure of versatility; the amount of different offenses someone committed (Junger-Tas, 2010). Higher scores indicate more variety in the offenses, which is a preferred scale to measure delinquent behavior (Sweeten, 2012).

## 2.3. Data analyses

First, the characteristics of the three groups of family violence at T1 (violence stopped, violence diminished, and persisting family violence) were described using SPSS (version 27). Second, to compare the "persisting violence" group with the "violence diminished" group and the "violence stopped" group respectively on trauma symptoms and delinquent behavior, we used a structural equation model (Mplus version 7; Muthén & Muthén, 2005). A dummy variable was created with the "persisting violence" group as reference group. Trauma symptoms at T1 and delinquent behavior at T1 were regressed on this dummy variable. As control variables were included: trauma symptoms at T0 on trauma symptoms at T1, and age and sex of the child and delinquent behavior at T0 on delinquent behavior at T1. The questionnaire of trauma symptoms already takes sex and age of children into account, therefore age and sex were not included in the analyses as control variables for trauma symptoms. Cases with incomplete data were retained in the analysis by including the variance of the predictors in the models in Mplus. Furthermore, for the 34 families who participated with two children we checked for dependency in the data by assessing variance at the family level. This indicated that there was no dependency in the data. In addition, we conducted the analyses twice; once with all respondents, and once after randomly selecting one child for each family. If results for both analyses were the same we reported statistics conducted for all respondents (including siblings). Additionally, due to non-normality we used the robust maximum likelihood estimator (MLR).

## 3. Results

## 3.1. Descriptive statistics

On average, respondents reported 97.64 (SD = 122.26, min = 4.00, max = 890.00) incidents of family violence at T0 and 28.32 (SD = 34.71,

min = 0.00, max = 156.00) incidents of family violence at T1. The mean score of respondents on their PTS symptoms at T0 was 45.57 (SD = 8.25, min = 33.00, max = 70.00) and 43.97 (SD = 8.22, min = 33.00, max = 73.00) at T1. Respondents committed offenses on average 0.78 (SD = 1.37, min = 0.00, max = 6.00) at T0 and 0.82 (SD = 1.49, min = 0.00, max = 8.00) at T1. Furthermore, all families did report persisting family violence at T0, whereas 19 families reported no violence anymore at T1 and 23 families reported decreased family violence at T1. This means that still the most families (n = 120) reported also persisting violence at T1. Characteristics of the respondents specified for the three group (violence stopped, violence diminished, and persisting family violence at T1) are shown in Table 1.

## 3.2. Main analyses

The model to compare PTS symptoms and delinquent behavior of the "persisting violence" group with the "violence diminished" and "violence stopped" groups is shown in Fig. 2. To increase readability, the included control variables are not presented in the model. Regarding PTS symptoms, the analysis revealed a significant difference between the "persisting violence" and "violence diminished" group when controlling for trauma symptoms at T0,  $\beta = -0.210$ , p < .001, 95% CI = [-0.287, -0.132], b = -4.897. However, there was no significant difference between the "persisting violence" group and the "violence

**Table 1**Characteristics and family violence of the three groups.

	Violence stopped (n = 19)	Violence diminished (n = 23)	Persisting violence (n = 120)
	N (%)	N (%)	N (%)
Age of parents			
25-34 years	3 (16%)	2 (9%)	20 (17%)
35-44 years	10 (52.5%)	11 (48%)	65 (54%)
45-54 years	6 (31.5%)	10 (43%)	32 (27%)
55 and older	0 (0%)	0 (0%)	3 (2%)
Paid job of parents			
Yes	11 (58%)	15 (65%)	57 (48%)
Household income			
< 1.500	8 (42%)	10 (44%)	59 (49%)
1.500-3.100	7 (37%)	9 (39%)	47 (39%)
greater than 3.100	4 (21%)	4 (17%)	14 (12%)
Highest education of			
parents			
Lower education	0 (0%)	1 (4%)	11 (9%)
Lower level of	3 (16%)	5 (22%)	32 (27%)
Secondary Education			
Higher level of Secondary Education	10 (53%)	13 (57%)	44 (37%)
Higher education	6 (32%)	4 (17%)	33 (28%)
Migration			
background			
Parent(s) with	5 (26%)	7 (30%)	52 (43%)
migration			
background <sup>a</sup>			
Sex of child			
Boy	8 (42%)	11 (48%)	51 (43%)
	Mean (SD)	Mean (SD)	Mean (SD)
Age of children	13.21 (2.76)	11.72 (2.60)	12.18 (2.41)
Family violence T0	114.95 (172.69)	107.39 (180.92)	93.03 (97.84)
Family violence T1	0.42 (0.90)	4.13 (3.56)	37.38 (36.16)
PTS symptoms T0	43.94 (6.37)	46.50 (8.20)	45.64 (8.54)
PTS symptoms T1	41.85 (9.26)	40.19 (4.26)	45.02 (8.48)
Delinquent behavior T0	0.53 (0.84)	0.39 (1.12)	0.89 (1.47)
Delinquent behavior T1	0.37 (0.76)	0.35 (0.65)	0.99 (1.66)

<sup>&</sup>lt;sup>a</sup> they were born or at least one of their parents was born outside the Netherlands.

stopped" group ( $\beta=$  -0.120, p=.184, 95% CI = [-0.269, 0.029], b=-3.039), when controlling for trauma symptoms at T0. This indicates that children who still experience severe family violence have higher PTS scores than children who experience a decrease in family violence, whereas children from families with persisting family violence did not differ from children from families where violence stopped.

Regarding delinquent behavior, a significant difference was found between the "persisting violence" group and the "violence diminished" group ( $\beta=$ -0.096, p<.01, 95% CI = [-0.156, -0.036], b=-0.402) as well as between the "persisting violence" group and the "violence stopped" group ( $\beta=$ -0.118, p<.05, 95% CI = [-0.208, -0.028], b=-0.535), when controlling for delinquent behavior at T0, age and sex of the child. These results suggest that children who experience persisting family violence reported more variety in their delinquent behavior than children who experienced a decrease in family violence and children for whom the violence stopped.

The above results are based on the total sample. Analyses revealed no differences between analyses with all respondents and the analysis with one randomly selected child per family.

#### 4. Discussion

This longitudinal study aimed to compare developmental outcomes of children from families with persisting violence to families in which the violence diminished or stopped. In most families violence persisted, whereas violence decreased or ceased in a small group of families. We fully acknowledge that our small sample size and moderate model fit prevent us from drawing far-reaching conclusions, yet we feel that our results carry some weight in light of the general difficulty to include families reported for family violence in scientific studies. The current study reveals that, compared to children who experience persisting family violence, children for whom the violence has diminished report less delinquency and trauma. For children in families where violence had ceased the results were less unequivocal; delinquency decreased, whereas no decrease in trauma symptoms was found.

Consistent with the literature, our results confirm that children for whom family violence decreases or ceases show less variety in their delinquent behavior than children who are still exposed to persisting family violence. The current study further confirms that children experience less posttraumatic stress when violence diminishes. These results support previous research indicating that children exposed to severe family violence experience more post-traumatic stress (Mishra et al., 2018; Yoon et al., 2018), and are more often engaged in delinquent behavior (Dijkstra et al., 2019; Kerig & Becker, 2015; Yoon et al., 2018). Furthermore, the results are consistent with prior studies that consistently show that children exposed to chronic maltreatment experience more adjustment problems than children exposed to transient maltreatment (Ethier et al., 2004b; Li & Godinet, 2014; Manly et al., 1994; Thornberry et al., 2001). Whereas earlier studies on chronic and transient family violence included children from birth to twelve years, the current study adds to the current body of knowledge that this also applies to children aged between eight and eighteen years. The current study further contributes to previous research by comparing the continuation of severe family violence with a decrease or a cessation. Previous research investigating chronic and transient family violence did not compare families exposed to persisting violence with families in which the violence diminished or ceased, whereas our study included three groups; a group of youth who still experienced severe family violence, a group of youth for whom the family violence had decreased from severe family violence to moderate family violence, and a group of youth for whom the violence had ceased.

Against expectations, children for whom the violence ceases do not experience less posttraumatic stress compared to children who experience persisting family violence. This remarkable and confusing finding could be the result of the small sample size of the current study. This result may be explained by the small group of children experiencing a

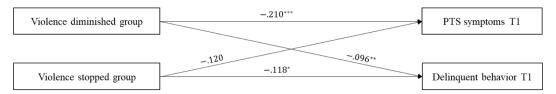


Fig. 2. Model summary of group comparison regarding PTS symptoms and delinquent behavior Note: Reference group is the "persisting violence" group. Standardized coefficients (beta's), \* p < .05, \*\*\* p < .01, \*\*\* p < .001. The control variables include PTS symptoms at T0 ( $\beta = 0.485$ , p < .001) for PTS symptoms at T1, and delinquent behavior at T0 ( $\beta = 0.404$ , p < .001), age ( $\beta = 0.129$ , p < .05) and sex ( $\beta = -0.093$ , p = .221) for delinquent behavior at T1. RMSEA: 0.079, CFI: 0.819, TLI: 0.804, SRMR: 0.057.

complete cessation of violence, so the current study might be underpowered to detect effects for this group. However, due to the limited number of studies on the cessation of family violence it was not possible to estimate parameters necessary to perform an adequate power analysis for sample size justification. Given the specific target group, the sample justification of this study is based on resource constraints (cf. Lakens, 2021). This means that we conducted the study with the respondents we could include within a given timeframe.

Another possible explanation for the result that trauma symptoms did not differ between the persisting violence and stopped violence groups, might be that the duration of the family violence is unknown. Research has shown that the most important predictors of the continuation of family violence seem to be the frequency and severity of the violence in the past (Frias & Angel, 2007; Kuijpers et al., 2011; Walker et al., 2013). This indicates that more prolonged family violence is more difficult to stop. It might well be that families for whom the violence continued or decreased were exposed for a longer period of time and to more severe and frequent family violence before the report to child protection services was made, than families for whom the violence has ceased. As a result, potential decreases in trauma symptoms of children in the 'violence stopped' group could be less profound, and therefore not detected in the current study.

Finally, these contradictory results might also be due to other important factors that affect trauma symptoms of children, but were not included in our study. For example, several studies suggest that there can be gaps between periods of family violence (English et al., 2005; Margolin et al., 2009). The fluctuations in family violence in the current study are unknown. In addition, a comprehensive review identified different trajectories that children can follow after a traumatic event: resilience, recovery, chronic and delayed onset (Galatzer-Levy et al., 2018). Moreover, trauma symptoms of both fathers and mothers (Lünnemann et al., 2019; McFarlane et al., 2014) as well as parenting stress (Crusto et al., 2010; Telman et al., 2016) are often indicated as important predictors of trauma symptoms by children exposed to family violence. Even when there is a period without violence, stress of children might remain high because of anticipatory anxiety about future incidences of violence. Otherwise, parents might be traumatized or experience high levels of parental stress, thereby, being less responsive and less emotional available to their children (Scheeringa & Zeanah, 2001).

## 4.1. Limitations, strengths and directions for future research

This study has some limitations, but also several distinctive contributions to the existing literature and suggestions for future research. First of all, this study is conducted with a very specific and difficult to reach group of respondents. In the current study, all families were reported for severe family violence to child protection services, and although this makes it difficult to generalize our results to all young people exposed to family violence, we believe that the results of our study can be of importance for all families experiencing family violence. Posttraumatic stress and delinquency are related to family violence, independent of family background or context of the violence (Steketee et al., 2020).

Secondly, the current study uses self-report questionnaires, with the possible effect of respondents underreporting or overreporting due to social desirability or problems with recalling exact details (Sugarman & Hotaling, 1997). Studies of family violence indicate that people are especially likely to underreport rather than overreport, that agreement across family members is small, and that estimations are less accurate when family violence was only measured using one informant (Langhinrichsen-Rohling & Vivian, 1994; O'Brien et al. 1994; Sternberg et al., 1998). To counteract these possible pitfalls, we used multi-informant data of family violence. This means that we included data gathered from mothers, fathers, and children to measure family violence, obviating the above problems.

A final important contribution of the current study is that we conceptualized family violence as consisting of both direct and indirect (witnessing intimate partner violence) maltreatment of children, whereas research on chronic and transient child maltreatment only includes direct maltreatment. It is important to consider both types of maltreatment, because direct maltreatment often occurs simultaneously with indirect maltreatment (Holt et al., 2008) and indirect maltreatment is also related to seriously deleterious consequences for children (Chan & Yeung, 2009; McTavish et al., 2016). Furthermore, studies indicate that children exposed to both direct and indirect maltreatment are more likely to experience internalizing and externalizing behavior problems than children who are only exposed to direct or indirect maltreatment (Moylan et al., 2010; Park et al., 2012; Steketee et al., 2019). Unfortunately, it was not possible to differentiate between direct and indirect maltreatment due to the small sample size of our study. In addition, children exposed to (a combination of) specific types of family violence, such as physical or psychological violence, experience more internalizing or externalizing problems (Arata et al., 2007; Evans & Burton, 2013; Messman-Moore et al., 2017). Therefore, further research should discriminate between the different types of family violence, but also between experiencing direct or indirect maltreatment. In doing so, a questionnaire of neglect with a higher reliability is proposed. In the current study the Cronbach's alpha of the subscale neglect is poor, whereas the Cronbach's alphas of all other scales were sufficient to satisfactory. It should be noted, though, that poor reliability does not necessarily mean lack of validity (Straus et al., 1998).

In addition, as one of the reviewers suggested, it is conceivable that the received support as well as separation from the perpetrator impacted the experienced family violence and children's outcomes. In our study, all families were reported to child protection services at the start of the study. This did not mean that all families, especially children, received support (Steketee et al., 2020). However, receiving appropriate support may have decreased the experienced family violence as well as children's trauma symptoms and delinquent behavior between the waves. Furthermore, it is possible that children who do no longer live with the perpetrator are no longer a victim of maltreatment or a witness of the violence between their caregivers. On the other hand, several studies suggest that separation from the perpetrator does not necessarily mean that the violence ceases and the well-being of victims increases (Anderson & Saunders, 2003; Bybee & Sullivan, 2005; Frias & Angel, 2007; Steketee et al., 2020). Therefore, further studies should include access to support services and separation from the perpetrator to

investigate the impact on both the cessation of family violence as well as children's outcomes.

Future research should also, if possible, follow families for a longer period of time and with more measurement waves to best capture fluctuations of family violence as well as internalizing and externalizing problems. After a period of cessation it is possible that family violence reemerges, for example due to changes in life circumstances of the family (Margolin et al., 2009). A recent *meta*-analysis indicates that studies who followed the internalizing and externalizing problems of children exposed to family violence with a longer period of time found stronger effects in between waves (Vu et al., 2016). Therefore, following families for a longer period is also important to identify possible delayed or sleeper effects.

Finally, a relationship between posttraumatic stress and delinquent behavior of children has been reported in the literature (Becker & Kerig, 2011). In the current study, however, it was impossible to investigate how these two outcomes are intertwined. Therefore, it is suggested for future research to explore more in depth the relationship between trauma symptoms and delinquency and their sequencing, especially in combination with continuation and cessation of family violence.

#### 4.2. Implications and conclusion

The findings of this study provide several implications for practitioners. The current study reveals that most families still experience severe family violence one and a half year after they were initially reported to child protection services. This confirms the statement of practitioners and researchers that in some families it is very difficult to stop the violence and it takes long-term work from families and health care workers to do so (Li & Godinet, 2014; Yoon et al., 2018; van Yperen et al., 2020). It is important to increase awareness of policy makers that family violence is a persistent problem and families experiencing family violence need specialized and long term care. A review concluded that interventions most effective to reduce family violence were programs that include comprehensive and integral family support (e.g., providing care for several problems at the same time), who have highly trained staff, and with a high involvement of practitioners who visit a family regularly and for several years, including long-term follow ups to monitor a family (Reynolds et al., 2009). A recent meta-analysis revealed that improving parenting skills and well-being of children, addressing mental health problems of parents, and providing social and emotional support were the most effective in reducing child maltreatment (Van der Put et al., 2018).

The current study further demonstrates that a decrease of family violence is related to less developmental problems for children aged between eight and eighteen years. This finding is especially important for practitioners working with families exposed to family violence. Practitioners often see children being reported again as adult parents, with recurring problems in their own family. The outcome of the current study might help practitioners by giving more insight into the mechanisms that break this intergenerational circle of violence, and to prevent children exposed to family violence to become a victim or perpetrator of violence as adolescent or adult (Assink et al., 2018; Dardis et al., 2015; Kaukinen, 2014; Montalvo-Liendo et al., 2015; Smith-Marek et al., 2015; Vagi et al., 2013). Explanations of the intergenerational transmission of violence are often found in trauma theory (Rossman, 1998; Wolfe et al., 2004) and social learning theory (Burgess & Akers, 1966). Traumatized children often experience feelings of anxiety and anger and consequently may react in an aggressive or violent way to others when triggered (Neller et al., 2005; Van der Kolk, 2000). Moreover, children exposed to family violence might learn that violence is acceptable and an appropriate way to solve problems and therefore are at risk to engage in delinquent behavior themselves (Savage, et al., 2014; Shorey et al., 2008). This delinquent behavior is not limited to adolescence; it is related to severe criminal behavior later in life (Ferwerda et al., 1996), as well as being a perpetrator of intimate partner violence (Herrenkohl

et al., 2007). Children who are traumatized or are engaged in delinquent behavior therefore have more risk to perpetuate the intergenerational transmission of family violence. It can thus be suggested that if children experience less trauma symptoms or are engaged in less delinquent behavior due to decrease or cessation of family violence, these children might also be better able to break the intergenerational transmission of violence. The effects of continuation and cessation of family violence on children and the intergenerational transmission of violence needs to be further investigated. However, practitioners should bear in mind that, even though family violence is a persistent problem, a continued focus on reducing family violence is necessary for the well-being of children both on the short and long term.

Overall, this study confirms that family violence is a persistent problem. However, we conclude that when family violence diminishes, the internalizing and externalizing problems of children decrease. The findings on families where violence stopped were less consistent; externalizing problems decreased, whereas internalizing problems did not. The current study raises awareness that parents and children reported to child protection services for family violence need specialized and long-term care to reduce family problems, because this is crucially beneficial for the well-being of future generations of children.

## CRediT authorship contribution statement

M.K.M. Lünnemann: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft. M.P.C.M. Luijk: Conceptualization, Writing – review & editing, Supervision. F.C.P. Van der Horst: Conceptualization, Writing – review & editing, Supervision. J. Jongerling: Methodology. M. Steketee: Conceptualization, Investigation, Writing – review & editing, Supervision, Project administration, Funding acquisition.

## **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgements

The current study was made possible with the financial support from the Dutch ministry, Dutch municipalities and Augeo Foundation.

## References

Akkermans, M., Gielen, W., Kloosterman, R., Moons, E., Reep, C., & Wingen, M. (2020). Prevalentiemonitor huiselijk geweld en seksueel geweld 2020 [Prevalence monitor of domestic and sexual violence]. https://repository.wodc.nl/bitstream/handle/20.500.12832/3019/3081c-prevalentiemonitor-huiselijk-geweld-en-seksueel-geweld-2020-volledige-tekst.pdf?sequence=15&isAllowed=y.

Anderson, D. K., & Saunders, D. G. (2003). Leaving an abusive partner: An empirical review of predictors, the process of leaving, and psychological well-being. *Trauma*, violence, & abuse, 4(2), 163–191. https://doi.org/10.1177/1524838002250769

Arata, C. M., Langhinrichsen-Rohling, J., Bowers, D., & O'Brien, N. (2007). Differential correlates of multi-type maltreatment among urban youth. *Child Abuse & Neglect*, 31 (4), 393–415. https://doi.org/10.1016/j.chiabu.2006.09.006

Assink, M., Spruit, A., Schuts, M., Lindauer, R., van der Put, C. E., & Stams, G. J. J. (2018). The intergenerational transmission of child maltreatment: A three-level meta-analysis. Child Abuse & Neglect, 84, 131–145. https://doi.org/10.1016/j. chiabu.2018.07.037

Becker, S. P., & Kerig, P. K. (2011). Posttraumatic stress symptoms are associated with the frequency and severity of delinquency among detained boys. *Journal of Clinical Child & Adolescent Psychology*, 40(5), 765–771. https://doi.org/10.1080/ 15374416.2011.597091

Braga, T., Gonçalves, L. C., Basto-Pereira, M., & Maia, A. (2017). Unraveling the link between maltreatment and juvenile antisocial behavior: A meta-analysis of prospective longitudinal studies. *Aggression and violent behavior*, 33, 37-50. https://psycnet.apa.org/doi/10.1016/j.avb.2017.01.006.

Briere, J. (1996). Trauma Symptom Checklist for Children (TSCC): Professional manual. Lutt: PAR, Psychological Assessment Resources. 10.1016/s0145-2134(01)00253-8.
Burgess, R. L., & Akers, R. L. (1966). A differential association-reinforcement theory of criminal behavior. Social problems, 14(2), 128–147. https://psycnet.apa.org/doi/10.1525/sp.1966.14.2.03a00020.

- Bybee, D., & Sullivan, C. M. (2005). Predicting Re-Victimization of Battered Women 3 Years After Exiting a Shelter Program. American Journal of Community Psychology, 30, 85–96. https://doi.org/10.1007/s10464-005-6234-5
- Carr, A., Duff, H., & Craddock, F. (2020). A systematic review of reviews of the outcome of noninstitutional child maltreatment. *Trauma, Violence, & Abuse, 21*(4), 828-843. 10.1177%2F1524838018789154.
- Chan, Y. C., & Yeung, J. W. K. (2009). Children living with violence within the family and its sequel: A meta-analysis from 1995–2006. Aggression and Violent Behavior, 14 (5), 313–322. https://doi.org/10.1016/j.avb.2009.04.001
- Cicchetti, D. (2016). Socioemotional, personality, and biological development: Illustrations from a multilevel developmental psychopathology perspective on child maltreatment. *Annual review of psychology, 67*, 187–211. https://doi.org/10.1146/annurev-psych-122414-033259
- Crusto, C. A., Whitson, M. L., Walling, S. M., Feinn, R., Friedman, S. R., Reynolds, J., ... Kaufman, J. S. (2010). Posttraumatic stress among young urban children exposed to family violence and other potentially traumatic events. *Journal of Traumatic Stress*, 23(6), 716–724. https://doi.org/10.1002/jts.20590
- Dardis, C. M., Dixon, K. J., Edwards, K. M., & Turchik, J. A. (2015). An examination of the factors related to dating violence perpetration among young men and women and associated theoretical explanations: A review of the literature. *Trauma, Violence,* & *Abuse,* 16(2), 136-152. 10.1177%2F1524838013517559.
- Dijkstra, S., Lünnemann, M., Boer, A., Lünnemann, K., & Moors, H. (2019). Huiselijk geweld en geweld in de publieke ruimte. Utrecht: Verwey-Jonker Instituut.
- Doelman, E. H., Luijk, M. P., Marshall, I. H., Jongerling, J., Enzmann, D., & Steketee, M. J. (2021). The association between child maltreatment and juvenile delinquency in the context of Situational Action Theory: Crime propensity and criminogenic exposure as mediators in a sample of European youth? European Journal of Criminology, 00(0), 1-20. 10.1177%2F14773708211013300.
- Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). Explaining delinquency and drug use. Beverly Hills, CA: Sage. 10.1002/1520-6807(199001)27:1%3C91::AID-PITS2310270115%3E3.0.CO;2-Y.
- English, D. J., Graham, J. C., Litrownik, A. J., Everson, M., & Bangdiwala, S. I. (2005). Defining maltreatment chronicity: Are there differences in child outcomes? *Child abuse & neglect*, 29(5), 575-595. https://psycnet.apa.org/doi/10.1016/j. chiabu.2004.08.009.
- Enzmann, D., Kivivuori, J., Marshall, I. H., Steketee, M., Hough, M., & Killias, M. (2017).
  A global perspective on young people as offenders and victims: First results from the ISRD3 study. Springer.
- Ethier, L. S., Couture, G., & Lacharité, C. (2004). Risk factors associated with the chronicity of high potential for child abuse and neglect. *Journal of Family Violence*, 19 (1), 13–24
- Ethier, L. S., Lemelin, J. P., & Lacharité, C. (2004). A longitudinal study of the effects of chronic maltreatment on children's behavioral and emotional problems. *Child abuse* & neglect, 28(12), 1265–1278. https://doi.org/10.1016/j.chiabu.2004.07.006
- Evans, C. B., & Burton, D. L. (2013). Five types of child maltreatment and subsequent delinquency: Physical neglect as the most significant predictor. *Journal of Child & Adolescent Trauma*, 6(4), 231–245. https://doi.org/10.1080/
- Evans, S. E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A metaanalysis of child and adolescent outcomes. Aggression and Violent Behavior, 13, 131-140. https://psycnet.apa.org/doi/10.1016/j.avb.2008.02.005.
- Ferwerda, H. B., Jakobs, J. P., Beke, B. M. W. A., Gerretsen, N. M., & Vandenbussche, E. (1996). Signalen voor toekomstig crimineel gedrag. Dienst Preventie, Jeugdbescherming en Reclassering, Ministerie van Justitie.
- FRA (Fundamental Rights Agency) (2014). Violence Against Women: An EU Wide Survey. Main Results Report. Vienna: FRA, http://fra.europa.eu/en/publication/2014/violence-against-women-eu-wide-survey-main-results-report.
- Frias, S. M., & Angel, R. J. (2007). Stability and change in the experience of partner violence among low-income women. Social science quarterly, 88(5), 1281–1306. https://doi.org/10.1111/j.1540-6237.2007.00503.x
- Galatzer-Levy, I. R., Huang, S. H., & Bonanno, G. A. (2018). Trajectories of resilience and dysfunction following potential trauma: A review and statistical evaluation. *Clinical psychology review*, 63, 41–55. https://doi.org/10.1016/j.cpr.2018.05.008
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *The lancet*, 373(9657), 68–81. https://doi.org/10.1016/s0140-6736(08)61706-7
- Herrenkohl, T. I., Kosterman, R., Mason, W. A., & Hawkins, J. D. (2007). Youth violence trajectories and proximal characteristics of intimate partner violence. Violence and victims, 22(3), 259–274. https://doi.org/10.1891/088667007780842793
- Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, 32 (8), 797–810. https://doi.org/10.1016/j.chiabu.2008.02.004
- Howell, K. H., Barnes, S. E., Miller, L. E., & Graham-Bermann, S. A. (2016). Developmental variations in the impact of intimate partner violence exposure during childhood. *Journal of injury and violence research*, 8(1), 1–15, 10.5249%2Fjivr. v811 663
- Infurna, M. R., Reichl, C., Parzer, P., Schimmenti, A., Bifulco, A., & Kaess, M. (2016). Associations between depression and specific childhood experiences of abuse and neglect: A meta-analysis. *Journal of Affective Disorders*, 190, 47–55. https://doi.org/10.1016/j.jad.2015.09.006
- Junger-Tas, J. (2010). The significance of the international self-report delinquency study (ISRD). European Journal on Criminal Policy and Research, 16(2), 71–87. https://doi. org/10.1007/s10610-010-9119-6
- Junger-Tas, J., & Marshall, I. H. (2012). Introduction to the international self-report study of delinquency (ISRD-2). In Junger-Tas, J., Marshall, I. H., Enzmann, D.,

- Killias, M., Steketee, M., & Gruszczynska, B. (2012). The many faces of youth crime (pp. 3-20). Springer, New York, Nyx. 10.1007/978-3-319-63233-9 1.
- Kaukinen, C. (2014). Dating violence among college students: The risk and protective factors. Trauma, violence, & abuse, 15(4), 283–296. https://doi.org/10.1177/ 1524838014521321
- Kennedy, A. C., Bybee, D., Sullivan, C. M., & Greeson, M. (2009). The effects of community and family violence exposure on anxiety trajectories during middle childhood: The role of family social support as a moderator. *Journal of Clinical Child* & Adolescent Psychology, 38(3), 365-379. https://psycnet.apa.org/doi/10.1080/ 15374410902851713.
- Kennedy, A. C., Bybee, D., Sullivan, C. M., & Greeson, M. (2010). The impact of family and communityviolence on children's depression trajectories: Examining the interactions of violence exposure, family social support, and gender. *Journal of family* psychology, 24(2), 197. https://psycnet.apa.org/doi/10.1037/a0018787.
- Kerig, P. K., & Becker, S. P. (2015). 12 Early Abuse and Neglect as Risk Factors for the Development of Criminal and Antisocial Behavior. The development of criminal and antisocial behavior, 181-199. https://psycnet.apa.org/doi/10.1007/978-3-319-08720-7 12.
- 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. https://doi.org/10.1037/0022-006x.71.2.339
- Kouros, C. D., Cummings, E. M., & Davies, P. T. (2010). Early trajectories of interparental conflict and externalizing problems as predictors of social competence in preadolescence. *Development and psychopathology*, 22(3), 527, 10.1017% 2FS0954579410000258.
- Kuijpers, K. F., Van Der Knaap, L. M., & Lodewijks, I. A. (2011). Victims' influence on intimate partner violence revictimization: A systematic review of prospective evidence. *Trauma, Violence, & Abuse, 12*(4), 198–219. https://doi.org/10.1177/ 1524838011416378
- Lakens, D. (2021). Sample Size Justification. [Preprint]. PsyArXiv. 10.31234/osf .io/xp5cv.
- Lamers-Winkelman, F. (1998). Experimentele Nederlandse vertaling van de Trauma Symptom Checklist for Children (TSCC). Amsterdam, Vrije Universiteit, afdeling Orthopedagogiek.
- Lamers-Winkelman, F., Slot, N.W., Bijl, B., Vijlbrief, A.C. (2007). Scholieren Over Mishandeling. Resultaten van een landelijk onderzoek naar de omvang van kindermishandeling onder leerlingen van het voortgezet onderwijs. Amsterdam.
- Langhinrichsen-Rohling, J., & Vivian, D. (1994). The correlates of spouses' incongruent reports of marital aggression. *Journal of Family Violence*, 9(3), 265–284. https://doi. org/10.1007/BF01531951
- Li, F., & Godinet, M. T. (2014). The impact of repeated maltreatment on behavioral trajectories from early childhood to early adolescence. *Children and youth services* review, 36, 22-29. https://psycnet.apa.org/doi/10.1016/j.childyouth.2013.10.014.
- Lindert, J., von Ehrenstein, O. S., Grashow, R., Gal, G., Braehler, E., & Weisskopf, M. G. (2014). Sexual and physical abuse in childhood is associated with depression and anxiety over the life course: Systematic review and meta-analysis. *International Journal of Public Health*, 59(2), 359–372. https://doi.org/10.1007/s00038-013-0519-5
- Lünnemann, M. K. M., Van der Horst, F. C. P., Prinzie, P., Luijk, M. P. C. M., & Steketee, M. (2019). The intergenerational impact of trauma and family violence on parents and their children. *Child abuse & neglect*, 96, Article 104134. https://doi.org/10.1016/j.chiabu.2019.104134
- Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency, chronicity, and severity of child maltreatment on social competence and behavior problems. *Development and psychopathology*, 6(1), 121–143. https://doi.org/10.1017/S0954579400005915
- Manly, J. T., Kim, J. E., Rogosch, F. A., & Cicchetti, D. (2001). Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and psychopathology*, 13(4), 759–782.
- Margolin, G., Vickerman, K. A., Ramos, M. C., Serrano, S. D., Gordis, E. B., Iturralde, E., Oliver, P. H., & Spies, L. A. (2009). Youth exposed to violence: Stability, co-occurrence, and context. Clinical child and family psychology review, 12(1), 39-54. https://psycnet.apa.org/doi/10.1007/s10567-009-0040-9.
- Margolin, G., & Vickerman, K. A. (2011). Posttraumatic stress in children and adolescents exposed to family violence: I. Overview and issues. *Couple and Family Psychology:* Research and Practice, 1, 63–73. https://doi.org/10.1037/2160-4096.1.S.63
- McFarlane, J., Symes, L., Binder, B. K., Maddoux, J., & Paulson, R. (2014). Maternal-child dyads of functioning: The intergenerational impact of violence against women on children. *Maternal and Child Health Journal*, 18(9), 2236–2243. https://doi.org/10.1007/s10995-014-1473-4
- McFarlane, J., Fredland, N. M., Symes, L., Zhou, W., Jouriles, E. N., Dutton, M. A., & Greeley, C. S. (2017). The intergenerational impact of intimate partner violence against mothers on child functioning over four years. *Journal of Family Violence*, 32 (7), 645–655. https://doi.org/10.1016/j.chiabu.2019.104134
- McTavish, J. R., MacGregor, J. C., Wathen, C. N., & MacMillan, H. L. (2016). Children's exposure to intimate partner violence: An overview. *International Review of Psychiatry*, 28(5), 504–518. https://doi.org/10.1080/09540261.2016.1205001
- Messman-Moore, T. L., & Bhuptani, P. H. (2017). A review of the long-term impact of child maltreatment on posttraumatic stress disorder and its comorbidities: An emotion dysregulation perspective. Clinical psychology: science and practice, 24(2), 154-169. https://psycnet.apa.org/doi/10.1111/cpsp.12193.
- Mishra, A. A., Christ, S. L., Schwab-Reese, L. M., & Nair, N. (2018). Post-traumatic stress symptom development as a function of changing witnessing in-home violence and changing peer relationship quality: Evaluating protective effects of peer relationship quality. Child abuse & neglect, 81, 332–342. https://doi.org/10.1016/j.chiabu.2018.05.013

- Montalvo-Liendo, N., Fredland, N., McFarlane, J., Lui, F., Koci, A. F., & Nava, A. (2015). The intersection of partner violence and adverse childhood experiences: Implications for research and clinical practice. *Issues in Mental Health Nursing*, 36(12), 989–1006. https://doi.org/10.3109/01612840.2015.1074767
- Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence*, 25(1), 53–63. https://doi.org/10.1007/s10896-009-9269-9
- Muthen, L. K., & Muthen, B. O. (2005). *Mplus user's guide (8th ed.)*. Los Angeles, CA: Muthen & Muthen.
- Neller, D. J., Denney, R. L., Pietz, C. A., & Thomlinson, R. P. (2005). Testing the trauma model of violence. *Journal of Family Violence*, 201(3), 151-159. https://psycnet.apa. org/doi/10.1007/s10896-005-3651-z.
- O'Brien, M., John, R. S., Margolin, G., & Erel, O. (1994). Reliability and diagnostic efficacy of parents' reports regarding children's exposure to marital aggression. *Violence and Victims*, 9(1), 45–62. https://psycnet.apa.org/doi/10.1891/0886-6708.9.1.45.
- Park, A., Smith, C., & Ireland, T. (2012). Equivalent harm? The relative roles of maltreatment and exposure to intimate partner violence in antisocial outcomes for young adults. *Children and Youth Services Review*, 34(5), 962-972. https://psycnet. apa.org/doi/10.1016/j.childyouth.2012.01.029.
- Petersen, A., Joseph, J., & Feit, M. (2013). New directions in child abuse and neglect research. Washington: National Academies Press. 10.17226/18331.
- Renner, L. M., & Boel-Studt, S. (2013). The relation between intimate partner violence, parenting stress, and child behavior problems. *Journal of Family Violence*, 28(2), 201-212. https://psycnet.apa.org/doi/10.1007/s10896-012-9477-6.
- Reynolds, A. J., Mathieson, L. C., & Topitzes, J. W. (2009). Do early childhood interventions prevent child maltreatment? A review of research. Child maltreatment, 14(2), 182–206.
- Rossman, B. B. (1998). Descartes's error and posttraumatic stress disorder: cognition and emotion in children who are exposed to parental violence. In G. W. Holden, R. Geffner, & E. N. Jouriles (Eds.), APA science Vols. Children exposed to marital violence: Theory, research, and applied issues (p. 223–256). American Psychological Association.
- Savage, J., Palmer, J. E., & Martin, A. B. (2014). Intergenerational transmission: Physical abuse and violent vs. nonviolent criminal outcomes. *Journal of Family Violence*, 29 (7), 739–748. https://doi.org/10.1007/s10896-014-9629-y
- Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, 14(4), 799–815. https://doi.org/10.1023/A: 1013002507972
- Shorey, R. C., Cornelius, T. L., & Bell, K. M. (2008). A critical review of theoretical frameworks for dating violence: Comparing the dating and marital fields. Aggression and violent behavior, 13(3), 185-194. https://psycnet.apa.org/doi/10.1016/j. avb.2008.03.003.
- Smith, C. A., & Stern, S. B. (1997). Delinquency and antisocial behavior: A review of family processes and intervention research. *Social Service Review*, 71(3), 382–420. https://doi.org/10.1086/604263
- Smith-Marek, E. N., Cafferky, B., Dharnidharka, P., Mallory, A. B., Dominguez, M., High, J., & Mendez, M. (2015). Effects of Childhood Experiences of Family Violence on Adult Partner Violence: A Meta-Analytic Review. Journal of Family Theory & Review, 7(4), 498-519. https://psycnet.apa.org/doi/10.1111/jftr.12113.
- Steketee, M., Aussems, C., & Marshall, I. H. (2019). Exploring the impact of child maltreatment and interparental violence on violent delinquency in an international sample. *Journal of interpersonal violence*, 00, 1-33. 10.1177%2F0886260518823291.
- Steketee, M., Tierolf, B., Lünnemann, K., & Lünnemann, M. (2021). Kwestie van lange adem: kan huiselijk geweld echt stoppen. Utrecht: Verwey-Jonker Instituut.
- Sternberg, K. J., Lamb, M. E., & Dawud-Noursi, S. (1998). Using multiple informants to understand domestic violence and its effects. In G. W. Holden, R. Geffner, & E. N. Jouriles (Eds.), APA science Vols. Children exposed to marital violence: Theory, research, and applied issues (p. 121–156). American Psychological Association. 10.1037/ 10257-004.
- Sternberg, K. J., Baradaran, L. P., Abbott, C. B., Lamb, M. E., & Guterman, E. (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A mega-analysis. *Developmental Review*, 26(1), 89–112. https://doi.org/10.1016/j.dr.2005.12.001

- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, 17I(3), 283–316. https://doi.org/10.1177/ 01035130601703001
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249–270. https://doi.org/10.1016/S0145-2134(98) 00005-7
- Straus, M. A. (2006). Conflict Tactics Scale (CTS) Sourcebook: including revised versions CTS2 and CTSPC. Durham, NG: University of New Hampshire, Family Research Laboratory
- Sugarman, D. B., & Hotaling, G. T. (1997). Intimate violence and social desirability: A meta-analytic review. *Journal of Interpersonal Violence*, 12(2), 275–290. https://doi. org/10.1177/088626097012002008
- Sweeten, G. (2012). Scaling criminal offending. Journal of Quantitative Criminology, 28 (3), 533–557. https://doi.org/10.1007/s10940-011-9160-8
- Telman, M. D., Overbeek, M. M., de Schipper, J. C., Lamers-Winkelman, F., Finkenauer, C., & Schuengel, C. (2016). Family functioning and children's posttraumatic stress symptoms in a referred sample exposed to interparental violence. *Journal of family violence*, 31(1), 127–136.
- Thornberry, T. P., Ireland, T. O., & Smith, C. A. (2001). The importance of timing: The varying impact of childhood and adolescent maltreatment on multiple problem outcomes. *Development and psychopathology*, 13(4), 957–979.
- Tierolf, B., Lunnemann, K., & Steketee, M. (2014). Doorbreken geweldspatroon vraagt specifieke hulp. Onderzoek naar de effectiviteit van de aanpak van huiselijk geweld in de G4. Utrecht: Verwey-Jonker Instituut.
- Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of youth and adolescence*, 42(4), 633–649. https://doi.org/10.1007/s10964-013-9907-7
- Van der Kolk, B. (2000). Posttraumatic stress disorder and the nature of trauma. Dialogues in Clinical Neuroscience, 2(1), 7-22. doi:10.31887%2FDCNS.2000.2.1% 2Fbvdkolk.
- Van der Put, C. E., Assink, M., Gubbels, J., & van Solinge, N. F. B. (2018). Identifying effective components of child maltreatment interventions: A meta-analysis. *Clinical Child and Family Psychology Review*, 21(2), 171–202.
- Van Yperen, T., Kraak, A., Maat, van de, A., & Prakken, J. (2020). Veiligheid in gezinnen: knelpunten en oplossingen. Utrecht NJI.
- Vickerman, K. A., & Margolin, G. (2007). Posttraumatic stress in children and adolescents exposed to family violence: II. Treatment. Professional Psychology: Research and Practice, 38(6), 620. https://psycnet.apa.org/doi/10.1037/0735-7028.38.6.620.
- Vu, N. L., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2016). Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. Clinical psychology review, 46, 25–33. https://doi.org/ 10.1016/j.cpr.2016.04.003
- Walker, K., Bowen, E., & Brown, S. (2013). Desistance from intimate partner violence: A critical review. Aggression and violent behavior, 18(2), 271–280. https://doi.org/ 10.1016/j.avb.2012.11.019
- Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The Effects of Children's Exposure to Domestic Violence: A Meta-Analysis and Critique. Clinical Child and Family Psychology Review, 6(3), 171–187. https://doi.org/10.1023/A: 1024910416164
- Wolfe, D. A., Wekerle, C., Scott, K., Straatman, A. L., & Grasley, C. (2004). Predicting abuse in adolescent dating relationships over 1 year: the role of child maltreatment and trauma. *Journal of abnormal psychology*, 113(3), 406-415. https://psycnet.apa. org/doi/10.1037/0021-843X.113.3.406.
- Yoon, S., Barnhart, S., & Cage, J. (2018). The effects of recurrent physical abuse on the co-development of behavior problems and posttraumatic stress symptoms among child welfare-involved youth. *Child abuse & neglect*, 81, 29–38. https://doi.org/ 10.1016/j.chiabu.2018.04.015
- Zhang, S., Benson, T., & Deng, X. (2000). A test-retest reliability assessment of the international self-report delinquency instrument. *Journal of Criminal Justice*, 28(4), 283–295. https://doi.org/10.1016/S0047-2352(00)00045z