

Concordance Between Parents in Perpetration of Child Mistreatment: How Often Is It by Father-Only, Mother-Only, or by Both and What Difference Does It Make?

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Abstract

Research on child mistreatment tends to focus on the mother or the father as the abusing parent, even though there is wide agreement that both theory and practice should deal with child maltreatment as a family system problem. Most children have the benefit or the risk of more than one caretaker for substantial periods of their lives, most often two parents or stepparents. This article is intended to illustrate the value of research which uses concordance analysis (CA) to identify children who experienced three *dyadic concordance types* (DCTs) of mistreatment: *father-only*, *mother-only*, or *both* parents, including single-parent combinations of caretakers. A concordance approach that identifies possible abusers in addition to the presenting parent using the three DCTs is a practical first step toward a family system perspective to enhance child abuse theory, research, and practice.

Keywords

dyad, family system, gender, abuse, violence

This article originated in the belief that when both parents mistreat a child, the adverse effects is likely to be greatest and that when only one parent abuses, the effects for a child can be different depending on whether it was by the mother or the father. Research on the causes of mistreatment and maltreatment also needs to take into account whether such negative actions are by both parents, and if only one, which one, because the etiology of those three types might be different. The objective of this article is not to present an empirical study of those issues or a review of literature. Rather, the objective is to bring together examples of empirical findings from diverse studies of physical and other types of mistreatment, which identified whether the father, the mother, or both mistreated a child, with the intent of increasing the attention to multiple perpetrators (especially fathers and mothers) in research and practice concerned with child mistreatment and maltreatment.

Most researchers and practitioners would probably agree on the need to take a “whole family” or family systems perspective to understand and treat child abuse, including the specific aspect which is the focus of this article: whether abuse is by the father or mother alone, or by both. However, the extent to which research and practice operationalizes that belief is more limited. One explanation for the discrepancy may be that the cases studied or assisted are identified by the behavior of mothers receiving public assistance or clients of domestic violence services. The focus, as it should be, is on helping such mothers to obtain the resources that they need in order to be more stable

parents. But, other caretakers in the family unit may also need this help. Another reason for inattention to mistreatment by both parents/caretakers is that instruments to measure child maltreatment may ask only about behavior by the presenting client or study participant who, as pointed out above, tend to be mothers or do not specifically ask about each caregiver.

The *Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress* says, “Some children were maltreated by both” (Sedlak et al., 2010, p. 14) and provides no further information. The report also indicates that “. . . 68% of the maltreated children were maltreated by a female, whereas 48% were maltreated by a male,” which suggests that many were instances of both parents abusing the child/children. The Canadian Incidence Study of Reported Child Maltreatment (Trocmé & Wolfe, 2001) reports that 46% of the perpetrators of substantiated cases of physical abuse

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were fathers, but does not report the percentage of cases in which both parents or caretakers abused. The 2013 national statistics on cases known to child protective services (CPS) in the 50 U.S. states indicate that 45% of the time the abusing parent was a mother and 22% of the time fathers (U.S. Department of Health & Human Services, 2015). But were mothers really twice as often the abusive parent than fathers? This article explores these issues.

Although being exposed to physical violence between parents is now recognized as a type of maltreatment, the forms completed by CPS workers typically ask only if there is domestic violence present in the home, not if was by the father, by the mother, or both (Baynes & Holland, 2012; Devaney, 2008). Research using that data and interventions to end the violence are therefore often unable to distinguish between when it was only by the father, only by the mother, or when, as found by all studies which do have this data, most partner violence involves assaults between both parents against each other (Langhinrichsen-Rohling, Selwyn, & Rohling, 2012; Michel-Smith & Straus, 2014).

Current Article

A central objective of this article is to illustrate what is learned about child maltreatment when that is taken into account by classifying cases into *dyadic concordance types* (DCTs). The three DCT categories are *father-only*, *mother-only*, or *both* mistreated a child. Identifying which of the three DCTs characterizes a case is the basic first step in *concordance analysis* (CA). CA is a recently introduced dyadic approach to family relationship problems (Rodriguez & Straus, 2016; Straus, 2015). It supplements and augments the widely used *actor-partner interaction model* (APIM) dyadic approach. Although APIM has been used for many family relationship problems, it has only rarely been applied to research on child maltreatment (Riggs, Cusimano, & Benson, 2011). APIM is a tool that allows one to predict the pathways to particular dependent variables or outcomes. DCT is also a research tool, but it provides descriptive information about the sample (Straus & Douglas, Provisionally Accepted), which is the advantage for this particular article.

Identification of DCTs is practical because it requires only determining whether each parent mistreated the subject child. A clinician then almost instantly knows the DCT of the case. In research, a cross tab results in four cells, one is the cases in the father-only category, one the mother-only, and one the both mistreated category. If the study sample is from the general population, the fourth cell identifies the *neither* group (the “reference category” for statistical analyses). The theoretical basis and methodology of DCTs for describing and analyzing many forms of intrafamily maltreatment, not just child mistreatment or maltreatment, are presented in a previous article (Straus, 2015). This approach can be taken with children in single-parent households because others, such as a grandmother or parent’s partner, often provide child care even if they do not reside in the home. They are a large percentage of cases

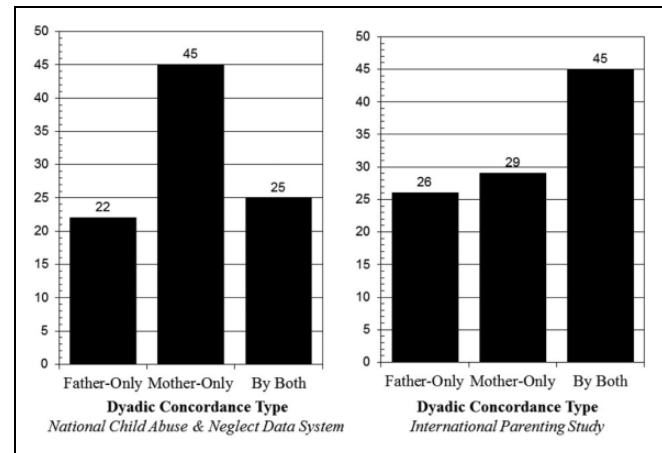


Figure 1. Concordance between parents in physical abuse.

known to CPS. DCTs for these situations can be created using the same method as when there are two parents. It also assures identifying the ameliorative effects of supportive parenting by the other parent or caretaker (Alexander, 2014).

The objective of increasing attention to multiple perpetrators (especially fathers and mothers) is also important for understanding the effect of children growing up with parents who are violent toward each other. The adverse effects of children’s exposure to violence are well established (Holden, Gelfner, & Jouriles, 1998; Straus, 1992). However, most of this research examined only cases of father-to-mother assault or failed to identify the abusing parent. In contrast, studies that examined the role of both parents in potentially assaulting each other found the same or greater harm when the mother is the only one to assault the other parent (Kwong, Bartholomew, Henderson, & Trinke, 2003; Moretti, Bartolo, Craig, Slaney, & Odgers, 2014; Straus, 1992). Exploring the potential difference it makes in outcomes if the child is exposed to violence between partners, that is mother-only, father-only, or both, is the second objective of this article, which is also accomplished through the use of CA. A concluding objective is to suggest the implications for research, prevention, and treatment of identifying the DCT of the cases studied or treated.

Extent of Concordance Between Parents in Child Mistreatment

Concordance in Physical Abuse

Only a few studies report DCTs for physical abuse or the data needed to identify them. This section compares two of them. Figure 1 presents the percentage in each DCT found by two very different studies. Both are graphed in the same figure to draw attention to the ways they are similar as well as different. The data in the left panel of Figure 1 are from the annual report on child maltreatment cases known to CPS in the United States, which is based on the 2013 data from the *National Child Abuse & Neglect Data System* (U.S. Department of Health & Human Services, 2015). The results on the right side of Figure 1 are

from a study of 11,408 students in the 15-nation *International Parenting Study* that was conducted between 2007 and 2010 (Straus, 2008; Straus & Michel-Smith, 2014). The DCTs for CPS records were mother-only 45%, but for the student-report data, mother-only was just 29%, and the largest category was both abused (45%). However, the percentage of father-only is similar between the two data sources (22% and 26%). The two studies differ in many ways, making the difference in the percentages difficult to interpret. For example, about 13% of the child victims in this sample of children known to CPS are in the age bracket of 10 years, whereas for reasons given in Straus & Michel-Smith (2014), the student data were obtained for age 10. Another departure between the two is the vast difference in the sensitivity of the two studies. The physical abuse rate based on cases known to CPS is not presented by age, but for all cases in the United States, it is under 1%, compared to 21% of students who reported having been physically abused by being punched, kicked, or beaten up by a parent the year they were 10 years old. Although these differences make it difficult to understand why the percentage in each DCT is different for CPS cases and university student cases, it is still relevant for the issue of the current article. Among the many possible explanations is that the large percentage in the mother-only category reflects administrative procedures focused on the presenting case rather than on whole-family investigation of the child's history of abuse. It could also occur if the identified abuser hides abuse by the other parent. It is important to recognize that sensitivity of measures is only one of a handful of issues that should be considered when comparing outcomes of studies. Other considerations include definitions, methods of data collection, age of children and respondents, official versus self-reported data, and year that data were collected—just to mention a few.

Method of calculating percentage in each DCT. The bars in right side of Figure 1 are for the subgroup of students who experienced physical abuse rather than the percentage of the total sample in each DCT. Calculating the percentage in each DCT on the basis of the subgroup involved in abuse was used and is recommended when an objective is to compare different studies or different forms of abuse. This is needed to control for differences in the sensitivity of studies and in the prevalence of different forms of abuse, as described in the previous section. If the percentage of the *total student sample* had been used to calculate the percentage in, for example, the mother-only DCT, it could be 20 times higher than in the child protection cases. However, as Figure 1 shows, when controlling for sensitivity of the measure, the percentage mother-only when there was abuse is much *lower* for the student sample. At the same time, it is important to keep in mind that, using this method, the percentage in each DCT is only for the cases in which abuse had occurred.

To compare different forms of abuse, as in the case of comparing different studies, it may be necessary to control for differences in prevalence. This is illustrated in the next section of this article which compares the percentage in each DCT for

four abusive behaviors (neglect, rejection of the child, spanking, and assaulting the other parent). The percentage in each DCT is based on only the cases with the index form of mistreatment. Using this procedure, the results show that despite differences in the prevalence of these behaviors, the both category was always at least 45% of the cases in which the behavior has occurred (as observed in the forthcoming Figure 2a–d). The implications of the predominance of cases in the both DCT are examined more fully in the Discussion section.

Despite the above, identifying DCTs on the basis of the total sample is necessary for one key purpose of CA. This is to test the hypotheses about what difference it makes if the child is in one or the other of the three DCTs. Examples are given in the “Do Dyadic Concordance Types Differ In Their Relation To Child Well-Being?” section.

Concordance in Other Modes of Mistreatment

Up to this point, DCTs for *physical* abuse have been the focus. It is important to have information on their use in relation to other maltreating behaviors by parents. This section and the one which follows use published results and data on samples available to the author to provide that information.

Neglect. Figure 2a gives the distribution of DCTs for neglect as measured by the *Multidimensional Neglect Scale* (Kaufman Kantor et al., 2004; Straus, 2003) for the childhood experiences of students in 15 nations, also from the *International Parenting Study*; the left side of the figure reports scores for male students, the right for female. The bars are for students with neglect scores at or above the 80th percentile. This high cut-point was used because the items in the scale are for forms of neglect that would not usually be considered clinically important unless they occurred repeatedly. It shows that, when there is this level of neglect, most often it was by both parents. Part of the importance of these results stems from the fact that neglect is the type of maltreatment identified for about at least three quarters of cases of maltreatment dealt with by CPS in the United States. The finding that, when there is neglect, both is the predominant pattern is extremely important because neglect by one parent can be compensated for by the other parent. Therefore, interventions need to be based on an assessment of both parents.

Rejection. Figure 2b graphs the results of two very different studies of rejection of children by parents. The left side is data from interviews with a pioneer CA methodology of 158 parents of children in third grade (Eron, Banta, Walder, & Lulicht, 1961). The right side is for the sample of students in 15 nations using the Rohner (Rohner & Khaleque, 2005) scale to measure rejection. The data that are displayed are for the subsample with rejection scores at or above the 50th percentile. In these very different studies, rejection by both parents is documented by over half the cases. A study of rejection reported by 2,624 Italian children aged 10–16 (Miranda, Affuso, Esposito, & Bacchini, 2015) found similar percentages in each DCT.

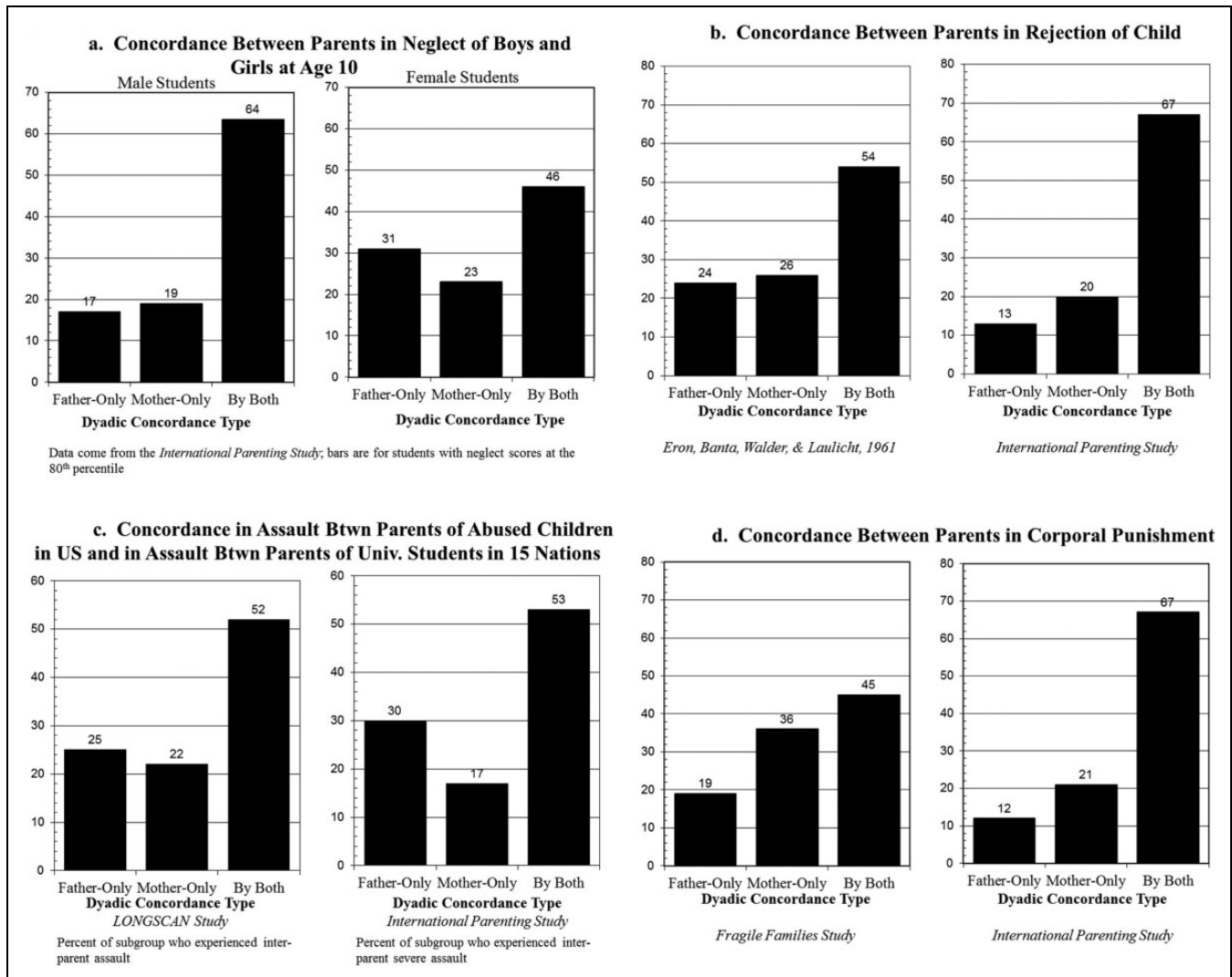


Figure 2. Concordance between parents in four modes of mistreatment toward children.

Violence between parents. Exposing children to violence between parents is now recognized as a form of child maltreatment (Bourassa, Lavergne, Damant, Lessard, & Turcotte, 2008; Straus, 1992). Like other forms of maltreatment, it adversely affects the social and psychological development of children subjected to it (Douglas & Hines, 2016; Holden et al., 1998; Straus, 1992; Straus, Douglas, & Medeiros, 2014b). The left panel of Figure 2c graphs data from the LONGSCAN study of 1,354 children in five U.S. states who either were reported for maltreatment or were judged to be at very high risk of maltreatment (Runyan et al., 1998). Fourteen percent of this sample, in addition to being victims of abuse or neglect, lived in homes where there was violence between the parents (as measured by mother's reports). The bars show that in 14% of the cases assault perpetration between the parents was father-only, mother-only, or both assaulted.

The right panel of Figure 2c is for the International Parenting Study sample of students in 15 nations. The results for *any* assault between the parents or adults in the home follow the

same pattern of DCTs. What is plotted in Figure 2c is for *severe* assault. Fourteen percent of the students were victims of growing up with parents who physically assaulted the other parent. Comparing the left panel of Figure 2c with the right panel shows that, when there was violence between parents of either the LONGSCAN abused child sample or the student sample, the largest percentage of cases were in the both assaulted DCT category. Moreover, the left panel of Figure 2c shows that this applies to cases of children known to CPS. The right panel of Figure 2c shows that it applies to cases of severe assault between the parents of students (see also Straus, 2011).

Although violence in the relationship of intimate couples is widely perceived to be perpetrated primarily by men, almost 300 studies have found similar rates of assault by male and female partners (Archer, 2000; Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012). The few can be tied to the methodology of several studies (Straus, 1999). The outstanding example is the U.S. National Crime Victimization Survey

(NCVS). The NCVS has consistently found about 85% of partner assaults were perpetrated by the male partner. The characteristics of this one survey produce results which are so different than almost all other studies of gender differences in assault have been identified before in Straus (1999). Empirical research has found that respondents are more likely to think of being attacked by a male than a female partner as a crime (Bates & Graham-Kevan, 2016; Sorenson & Taylor, 2005). As a result of these cultural beliefs, when someone has been hit by a male partner, the incident is more likely to be perceived and reported as a crime. A very small percentage of domestic assaults by either men or women results in injury (Stets & Straus, 1990), but when men assault, injury is more likely. Because injury is an important determinant of whether an attack is perceived as a “family fight” or a “crime,” that is key to how individuals respond to a crime survey. Given the culturally shaped perceptions of partner violence perpetrated by women, the percentage of assaults reported to be perpetrated by women is much lower than in surveys of crime than in surveys of family problems.

In addition to the meta-analyses already cited which identified more than 300 studies which found a similar percentage of women and men assaulted a partner, recent reviews have found over 50 studies which reported the percentage of violent couples in each measured DCTs (Langhinrichsen-Rohling et al., 2012; Michel-Smith & Straus, 2014). Both of these reviews found that the typical pattern is almost always similar to what is shown in Figure 2c: When there is violence in a relationship, about half the time it is bidirectional and that this even applies to clinical samples, such as cases receiving services for battered victims.

Spanking children. Is spanking a form of child maltreatment? In the United States when a child misbehaves, corporal punishment (CP) or “spanking” is legal and morally correct (Straus, Douglas, & Medeiros, 2014a). However if, rather than cultural norms, the criterion for maltreatment is whether a form of parenting is associated with an increased probability of the child developing social and psychological problems, there is overwhelming evidence, including longitudinal research, that legal CP is harmful (Gershoff, 2002; Straus et al., 2014b). Therefore, in this article, despite legal support in every state in the United States and cultural norms which support spanking, we conceptualized CP as a form of child maltreatment. This difference between the legal status and the conceptual evaluation is parallel to the distinction between the legal right of husbands in the United States until the 1970s to “physically chastise an errant wife” provided it was not excessive, wasn’t abuse (Straus, 2001; Straus et al., 2014b), and current conceptualization of that behavior as partner abuse. A similar change is occurring in respect to CP. Previously, it was both expected and required of good parents and was widely believed that, in addition to correcting misbehavior, CP “built character” (Henry, 1963/1974). Currently, most American parents probably think CP should be avoided, but at the same time, repeated national surveys found that about 70% of Americans believe “a

good hard spanking is sometimes necessary” and at least that percentage spank toddlers. These statistics and an explanation for this seeming inconsistency can be found in the study of Straus et al. (2014b).

The current extent of CP is shown in Figure 2d. The left side of the figure graphs the DCTs for spanking a nationally representative sample of U.S. children (Taylor, Lee, Guterman, & Rice, 2010; Taylor, Manganello, Lee, & Rice, 2010). The right side graphs the DCTs for CP experienced by 11,408 students in the 15-nation International Parenting Study (Straus & Michel-Smith, 2014). Both studies found very high rates for this aspect of parenting behavior. Regardless of whether the child has experienced CP by the mother-only, the father-only, or by both, it was associated with an increased probability of violence later in life, but especially if both parents used CP (Rebellion & Straus, 2014).

Despite the legal and cultural norms just cited, a growing minority of professionals recognize that, although spanking may be for the socially legitimate purpose of correcting misbehavior, it is associated with an increased probability of the child later manifesting social and psychological problems. This is based on research which found the subsequent problems associated with spanking are virtually the same as the problems associated with child abuse (Gershoff, 2002; Straus et al., 2014b). The main difference between CP and physical abuse is that the probability of the adverse effect is lower for CP than for physical abuse. For example, both CP and physical abuse have been found to be associated with an increased probability of assaulting a partner later in life, but the relative risk ratio is lower for CP although statistically significant (see the studies summarized in Straus et al., 2014a). Further, empirical studies, including longitudinal studies, have almost always found similar harmful effects (Lansford, 2010; Lansford et al., 2014; Straus et al., 2014b) in societies and sectors of society with cultural norms approving or requiring CP.

Consistency of Dyadic Concordance Types

For DCTs to be a standard part of identifying cases of child maltreatment, there needs to be evidence that DCTs are consistent across the varied circumstances in which child maltreatment occurs. Tables 1 and 2 provide evidence on that issue. The data in both tables are from the previously cited study of students in the International Parenting Study (Straus & Michel-Smith, 2014). For brevity, results from that study will be referred to as differences between nations. However, as explained in an article on the validity of results from cross-national studies of convenience samples of students (Straus, 2009), the findings refer to the effect of the national *context* of the students. It is a reasonable assumption that if an aspect of the national context applies to students, it is likely to also apply to other sectors of the population.

Table 1 shows that there is a similar distribution of DCTs in families in Asia, Europe, and North America. The most consistent pattern is that, when there is violence in the relationship of parents, it involves assaults by both parents in about half of

Table 1. Concordance Between Parents in Physical Abuse of Child in Three World Regions, by Sex of Child Reporting the Experience.

Region	Gender of Child	Percentage Who were Abused (%)	Dyadic Concordance Type		
			% Father-Only (%)	% Mother-Only (%)	% Both Abused (%)
Asia	M	53	20	21	58
	F	38	15	39	46
	Total	44	17	31	52
Europe and Israel	M	25	29	18	53
	F	17	28	33	39
	Total	20	28	28	44
North America	M	26	29	19	52
	F	15	25	37	38
	Total	18	27	29	44

Table 2. Concordance Between Parents in Physical Abuse of Child by National Context.

Region	National Context	Abused (%)	Dyadic Concordance Type		
			Father-Only (%)	Mother-Only (%)	Both Abused (%)
All nations		22	26	29.0	45
Asia	Hong Kong	40	19	27	54
	Taiwan	48	16	34	50
Europe	Belgium	13	46	30	25
	Greece	30	23	28	49
	Italy	19	20	37	44
	Poland	27	25	16	59
	Russia	24	28	30	42
	Scotland	16	45	35	21
	Slovenia	25	34	23	43
	Spain	12	22	35	43
	Switzerland	14	27	27	47
Mid-East	Israel	26	24	16	61
North America	Canada	17	27	30	43
	United States	19	26	29	45

such families. When there was just one violent parent, it was usually a similar percentage of father-only and mother-only. Table 1 also shows that although the column headed percentage violent shows differences between regions in the percentage of students with violent parents, the columns headed DCTs show that in all regions, and according to both male and females, when there was violence between their parents, the most frequent DCT was both parents assaulted. This pattern applies to the childhood experiences of both male and female college students, but the table also clearly shows that a larger percentage of males than females were physically abused in childhood.

Table 2 presents the data for each of the 15 nations. As is to be expected, there is more variability between nations than when the results are grouped by region, but the predominance of the both category is present for 14 of the 15 nations. Thus, regardless of whether the data to identify DCTs are provided by

men or women, and in almost all regions and almost all nations, identifying the DCTs of families produces a consistent distribution of cases in the three types.

Tables 1 and 2 show a high degree of constancy, but they are for just one aspect of abuse and are the results from a single study. Thus, the consistency could reflect the common methodology. Fortunately, there is evidence from other studies, such as research on partner violence from many studies using a wide variety of samples and methods, as shown in two meta-analyses (Archer, 2002; Langhinrichsen-Rohling et al., 2012; Straus, 2011).

Do Dyadic Concordance Types Differ in Their Relation to Child Well-Being?

What difference does it make for the child if maltreatment is father-only, the mother-only, or by both? Because of the difficulty locating empirical studies of this issue, most of the studies in this section are for the sample of the International Parenting Study.

Rejection

The percentage in each DCT for child rejection found by the pioneer study of concordance in child maltreatment (Eron et al., 1961) was presented previously in Figure 2b. In this section, the issue is whether the effects were different between the DCTs on the dependent variable which was using aggression against other children in school. Not surprisingly, children rejected by both parents had the highest aggression scores. When mother was the only rejecting parent, child aggression was also significantly higher, even though not as high as when both parents rejected. However, the level of aggression by children in the father-only rejected DCT was not different than for the children who were not rejected by either parent. A possible explanation to be investigated is whether this is because children spend more time with mothers and attachment to mothers may be more crucial for child development

Physical Abuse

Figure 3a summarizes the results of testing the hypothesis that having been severely assaulted by parents is associated with an increased probability of the child committing one or more crimes as a young adult. Severe assault was measured by the short form of the Parent-Child Conflict Tactics Scales (Straus & Mattingly, 2007) and specifically whether the parent had punched, kicked, or beaten up the student during the year they were 10 years old. Analysis of covariance was used, with controls for age of the student, education of the father and mother, and score on a Limited Disclosure Scale to control for socially desirable responding. All differences in Figure 3a are significant. First, comparing the right and left sides of Figure 3a shows that, consistent with most studies, men were more involved in crime than women. Second, contrary to the hypothesis that the criminogenic effect of having been abused would be greatest when both

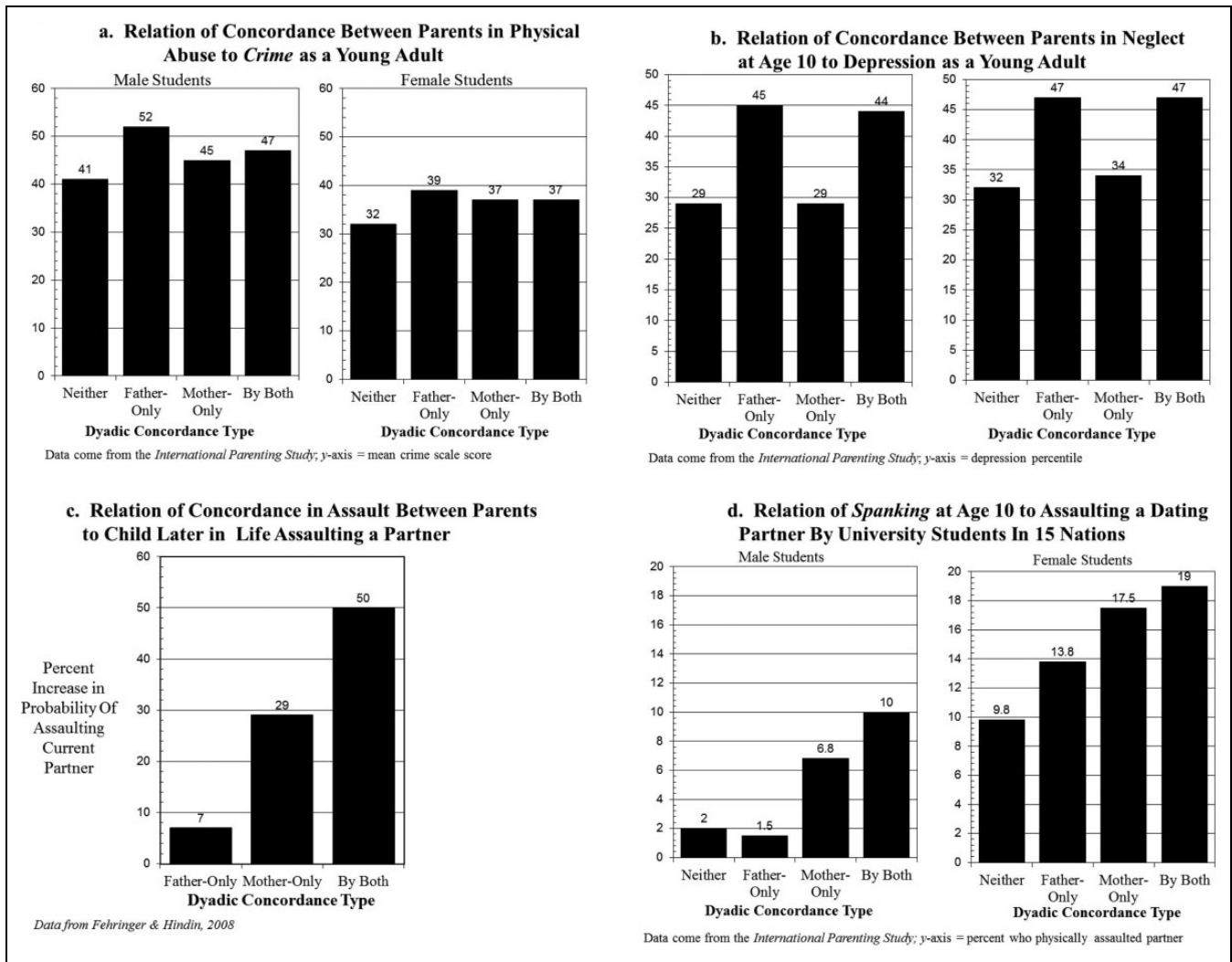


Figure 3. Relation of concordance in child maltreatment to subsequent child behavior problems.

Table 3. Concordance in Assault Between Parents of University Students in 15 Nations.

Region	n	Father-Only (%)	Mother-Only (%)	Both Assaulted (%)
Any assault				
All regions	1,485	25.4	22.4	52.3
Asia	110	30.9	14.5	54.5
Europe	655	28.5	21.7	49.8
Israel	48	60.4	6.3	33.3
North America	672	18.9	25.4	55.7
Severe assault				
All regions	733	30.2	16.5	53.3
Asia	81	32.1	18.5	49.4
Europe	313	38.3	15.7	46.0
Israel	18	38.9	0.0	61.1
North America	321	21.2	17.8	61.1

Note. Data collected from the International Parenting Study.

parents abuse, the results for both men and women show that the strongest relation to crime is for physical abuse by the father. Second, students in the mother-only category have higher crime scores than students of the same sex in the *Neither* category, but not as much greater as for those in the father-only category. This was very different than what was in the previous section on the relation of DCTs in child rejection to aggression by the child. This is an example of the need for replication, as discussed later, and the need for research on the mediating or moderating processes which could explain the differences between the three DCTs in child outcomes.

Neglect

Figure 3b summarizes the results for the hypothesis that neglect is associated with an increased probability of depression as a young adult. The criterion of neglect was a score at or above the

60th percentile on the Multidimensional Neglect Scale (Kaufman Kantor et al., 2004; Straus, 2006; Straus & Kaufman Kantor, 2005; Straus & Savage, 2005). As expected, depression was high when both parents neglected. Based on research showing closer bonds between children and mothers than fathers, we also expected that depression would be higher when only the mother neglected than when only the father neglected. But Figure 3b shows that for this sample, father-only neglect was associated with more depression.

Again, replication is needed. In addition to replication, research is needed to investigate the potential reasons for the relationships between different DCTs and various outcomes.

Violence Between Parent

Figure 3c summarizes the results of a longitudinal study of a birth cohort in the Philippines (Fehringer & Hindin, 2008). Violence between the mothers and their partners was measured. When the children were young adults, violence was measured in their marital relationship. This longitudinal design minimizes the risk of retrospective recall bias. The results are consistent with other studies which found that children exposed to interparental violence have an increased probability of physically abusing their own partner. It refines those results by showing that the risk of intergeneration transmission of partner violence is the greatest when both parents assault. This is important for treatment and prevention efforts. Prior research indicates that boys are more prone to developing externalizing behavior problems (e.g., aggression, impulsivity) as a result of child abuse, whereas girls more commonly develop internalizing problems (e.g., depression, social withdrawal; Widom, 1989), such that perpetration of abuse might be an extension of such externalizing problems among abused boys.

CP by Parents

Figure 3d summarizes the results on the relation of experiencing legal CP as a child to physically assaulting a dating partner later in life, after controlling for the level of misbehavior that led to the spanking and whether the parent also physically abused. The data are from the study of university students in 15 nations (Straus, 2013). Consistent with many other studies of the link between having been the victim of this aspect of violent socialization practiced by most American parents (Straus et al., 2014b), Figure 3d shows a strong link between spanking and later hitting a dating partner. The strongest link is for children hit by both parents. One aspect of Figure 3d that might be surprising is the stronger link between spanking and hitting a dating partner shown for women (right panel of Figure 3d) than for men. This result is consistent with the two meta-analyses cited previously which found the percentage of women who assaulted a male partner was about the same as the percentage of men who assaulted a female partner. However, this chart shows *more* women than men assaulted a partner. This is probably because studies of partner violence over the life course have found that, among young women, female perpetration is higher than male. By the time that men and women reach their late

20s, the rates become similar and stay that way for the rest of the life course (Archer, 2000; Stets & Straus, 1989; Suito, Pillemer, & Straus, 1990).

Discussion

Summary

The purpose of this article was to document the prevalence and extent of DCTs among perpetrators of child abuse and neglect, children's exposure to violence in the home, and CP. Furthermore, to assess the potential influence that differing DCT patterns may have on child well-being. The research summarized here found that having just one parent mistreat a child tends to occur in only about a quarter of cases. The most frequent pattern is that, when there is child mistreatment present, in about half the cases, both parents engaged in the abusive behavior. An objective of this article was to introduce use of DCTs as a practical way to identify cases in a way that calls attention to this pattern, while also identifying when abuse is by the mother-only or the father-only. The research in this article suggests that, when abuse is by just one parent, it is just as often the father as the mother.

In addition to being a practical typology, DCTs are a step toward a family system or whole-family approach to understanding child maltreatment. DCTs facilitate testing hypothesis about the effects for children of this aspect of the family system. Although DCTs describe only the parental dyadic subsystem of a family, not the full family system, analysis of this dyadic subsystem is an important step beyond the individual perpetrator mode of description and analysis. DCTs identify an important difference in what mistreated children experience. DCTs are also applicable to cases where the presenting parent is a single parent because other care takers such as the grandmother are often involved. The research summarized indicates that when children are faced with two caretakers who abuse, even if the severity of abuse is not greater than by one, it is a different experience. Research on the nature of that difference is needed to provide an empirical basis for helping those children.

The research results presented suggest that the three DCTs (mother-only, father-only, and both) tend to differ in the degree to which they are associated with child social and behavioral problems. The both type is usually but not always worse for children. Research to further understand the processes that result in abuse by fathers occurring almost as often as abuse by mothers, despite the lower average child care involvement of fathers, is needed. Another example is the finding that neglect, when it was only by fathers, had a *stronger* relation to child depression than neglect when it is only by the mother. The result cited was statistically significant but could reflect unique characteristics of that study and is another example of the need for replication discussed in the next section.

Limitations

A considerable amount of empirical research was covered in this article, but meta-analyses and systematic reviews are needed to examine the percentage of mother-only, father-only, or both for each type of maltreatment and the extent to which the effects differ for children.

Although the percentage in each DCT for different forms of maltreatment is supported by replications with similar percentages, when the issue is differences in the effects for children of being in one or the other of the three DCTs, there are few replications. The need for replication applies to every facet explored in this article as well as to all science. This was dramatically illustrated by the results of a study of 100 articles published in leading psychology journals (Open Science Collaboration, 2015). No evidence of fraud was found, but there were many instances of failure to replicate. The need for replication and further theoretical analysis is also suggested by the research of Edwards, Desai, Gidycz, and VanWynsberghe (2009) as well as Kaura and Allen (2004).

Conclusions

The research examples in this article suggest that more attention needs to be paid to multiple perpetrators. Most of the examples show that, regardless of the type of mistreatment, close to half, and usually more than half, of cases involved *both* father and mother as perpetrator. However, there are important exceptions such as the much lower percentage in the both DCT in cases known to U.S. CPS (25%). This could reflect administrative procedures in investigating and classifying cases. However, even assuming the actual prevalence of both is 25%, while about half of that of most other studies still suggests the potential value of giving more attention to multiple perpetrators within single-family systems. Moreover, even when the percentage of father-only is low, there can be considerable mistreatment by fathers. A study of a Mexican national sample of physical abuse in a sample of women who were either married or cohabiting with partners (Frias & Castro, 2014) found father-only 5%, mother-only 56%, and both 38%. Thus, although the father-only was rare, the use of DCT showed helped to identify cases to reveal that 43% fathers had abused overall.

Multiple perpetration is important not only because it is so prevalent, but also because, as discussed in this article, it is likely to have a greater adverse psychological effect for children and because abuse by different categories of caretakers can have different effects on children and may require different steps to support parents in the use of nonabusive or neglectful parenting strategies. Current research and treatment do not adequately take that into account because there tends to be an assumption that mothers are the perpetrators of child maltreatment and fathers are the perpetrators of partner violence. The research reported in this article suggests that each case needs to be examined to determine whether it is an instance of father-only, mother-only, or both for each mode of

mistreatment experienced by a child. If DCTs are identified, researchers can build steps into their data analysis to examine these three types and once a clinician or case manager asks about the behavior of multiple caregivers in the household, they can use the information to help develop a treatment plan that incorporates this fundamental aspect of each family.

Authors' Note

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References

- Alexander, P. C. (2014). *Intergenerational cycles of trauma and violence: An attachment and family systems perspective*. New York, NY: W.W. Norton & Company.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126*, 651–680. doi:10.1031/0033-2909.126.5.651
- Archer, J. (2002). Sex differences in physically aggressive acts between heterosexual partners: A meta-analytic review. *Aggression and Violent Behavior, 7*, 313–351. doi:10.1037/0033-2909.126.5.651
- Bates, E. A., & Graham-Kevan, N. (2016). Is the presence of control related to help-seeking behavior? A test of Johnson's assumptions regarding sex differences and the role of control in intimate partner violence. *Partner Abuse, 7*, 3–25. doi:10.1891/1946-6560.7.1.3
- Baynes, P., & Holland, S. (2012). Social work with violent men: A child protection file study in an English local authority. *Child Abuse Review, 21*, 53–65. doi:10.1002/car.1159
- Bourassa, C., Lavergne, C., Damant, D., Lessard, G., & Turcotte, P. (2008). Child welfare workers' practice in cases involving domestic violence. *Child Abuse Review, 17*, 174–190. doi:10.1002/car.1015
- Desmarais, S. L., Reeves, K. A., Nicholls, T. L., Telford, R. P., & Fiebert, M. S. (2012). Prevalence of physical violence in intimate relationships, Part 2: Rates of male and female perpetration. *Partner Abuse, 3*, 170–198. doi:10.1891/1946-6560.3.2.170
- Devaney, J. (2008). Chronic child abuse and domestic violence: Children and families with long-term and complex needs. *Child & Family Social Work, 13*, 443–453. doi:10.1111/j.1365-2206.2008.00559.x

- Douglas, E. M., & Hines, D. A. (2016). Children whose fathers seek help for partner violence victimization: Descriptive characteristics and their behavioral health as compared to a population-based sample. *Violence and Victims, 31*, 251–273. doi:10.1891/0886-6708.VV-D-14-00115
- Edwards, K. M., Desai, A. D., Gidycz, C. A., & VanWynsberghe, A. (2009). College women's aggression in relationships: The role of childhood and adolescent victimization. *Psychology of Women Quarterly, 33*, 255–265.
- Eron, L., Banta, T. J., Walder, L. O., & Laulicht, J. H. (1961). Comparison of data obtained from mothers and fathers on childrearing practices and their relation to child aggression. *Child Development, 32*, 457–472.
- Fehringer, J. A., & Hindin, M. J. (2008). Like parent, like child: Intergenerational transmission of partner violence in Cebu, the Philippines. *Journal of Adolescent Health, 44*, 363–371. doi:10.1016/j.jadohealth.2008.08.012
- Frias, S. M., & Castro, R. (2014). Violencia familiar en contra de las mujeres mexicanas. In I. Casique & R. Castro (Eds.), *Expresiones y contextos de la violencia contra las mujeres en Mexico* (pp. 259–312). Cuernavaca, Mexico: CRIM-UNAM-INMUJERES.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin, 128*, 539–579.
- Henry, J. (1963/1974). Making pete tough. In S. K. Steinmetz & M. A. Straus (Eds.), *Violence in the family* (pp. 238–240). New York, NY: Harper and Row.
- Holden, G. W., Geffner, R., & Jouriles, E. N. (1998). *Children exposed to marital violence: Theory, research, and applied issues*. Washington, DC: American Psychological Association.
- Kaufman Kantor, G., Holt, M. K., Mebert, C. J., Straus, M. A., Drach, K. M., Ricci, L. R., . . . Brown, W. (2004). Development and preliminary psychometric properties of the Multidimensional Neglectful Behavior Scale-Child Report. *Child Maltreatment, 9*, 409–428.
- Kaura, S. A., & Allen, C. M. (2004). Dissatisfaction with relationship power and dating violence perpetration by men and women. *Journal of Interpersonal Violence, 19*, 576–588. doi:10.1177/0886260504262966
- Kwong, M. J., Bartholomew, K., Henderson, A. J. Z., & Trinke, S. J. (2003). The intergenerational transmission of relationship violence. *Journal of Family Psychology, 17*, 288–301.
- Langhinrichsen-Rohling, J., Selwyn, C., & Rohling, M. L. (2012). Rates of bidirectional versus unidirectional intimate partner violence across samples, sexual orientations, and race/ethnicities: A comprehensive review. *Partner Abuse, 3*, 199–230. doi:10.1891/1946-6560.3.2.199
- Lansford, J. E. (2010). The special problem of cultural differences in effects of corporal punishment. *Law and Contemporary Problems, 73*, 89–106.
- Lansford, J. E., Sharma, C., Malone, P. S., Woodlief, D., Dodge, K. A., Oburu, P., . . . Di Giunta, L. (2014). Corporal punishment, maternal warmth, and child adjustment: A longitudinal study in eight countries. *Journal of Clinical Child and Adolescent Psychology, 43*, 670–685. doi:10.1080/15374416.2014.893518
- Michel-Smith, Y., & Straus, M. (2014). *Dyadic patterns of perpetration of physical assault and injury of dating partners by male and female university students in 32 Nations*. Paper presented at the Stockholm Criminology Symposium, Stockholm, Sweden. Retrieved from <http://pubpages.unh.edu/~mas2>
- Miranda, M. C., Affuso, G., Esposito, C., & Bacchini, D. (2015). Parental acceptance–rejection and adolescent maladjustment: Mothers' and fathers' combined roles. *Journal of Child and Family Studies, 25*, 1352–1362. doi:10.1007/s10826-015-0305-5
- Moretti, M. M., Bartolo, T., Craig, S., Slaney, K., & Odgers, C. (2014). Gender and the transmission of risk: A prospective study of adolescent girls exposed to maternal versus paternal interparental violence. *Journal of Research on Adolescence, 24*, 80–92. doi:10.1111/jora.12065
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science, 349*. doi:10.1126/science.aac4716
- Rebblon, C. J., & Straus, M. A. (2014). *Corporal punishment by parents and it's relation to subsequent social concern and crime by male and female university students in 15 Nations*. Paper presented at the International Family Violence and Child Victimization Research Conference, Sheraton Harborshide Hotel, Portsmouth, NH, July 7. Retrieved from <http://pubpages.unh.edu/~mas2>
- Riggs, S. A., Cusimano, A. M., & Benson, K. M. (2011). Childhood emotional abuse and attachment processes in the dyadic adjustment of dating couples. *Journal of Counseling Psychology, 58*, 126–138. doi:10.1037/a0021319
- Rodriguez, L. M., & Straus, M. A. (2016). Dyadic conceptualization, measurement, and analysis of family violence. In P. Sturmey, (Ed.) *Wiley handbook of violence and aggression*. New York, NY: John Wiley. Retrieved from <http://pubpages.unh.edu/~mas2/> IN PRESS.
- Rohner, R. P., & Khaleque, A. (2005). *Handbook for the study of parental acceptance and rejection*. Storrs, CT: Rohner Research Publications.
- Runyan, D. K., Curtis, P., Hunter, W. M., Black, M., Kotch, J. B., Bangdiwala, S., . . . Landsverk, J. (1998). LONGSCAN: A consortium for longitudinal studies of maltreatment and the life course of children. *Aggression and Violent Behavior: A Review Journal, 3*, 275–285.
- Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). *Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.
- Sorenson, S. B., & Taylor, C. A. (2005). Female aggression toward male intimate partners: An examination of social norms in a community-based sample. *Psychology of Women Quarterly, 29*, 78–96.
- Stets, J. E., & Straus, M. A. (1989). The marriage license as a hitting license: A comparison of assaults in dating, cohabiting, and married couples. *Journal of Family Violence, 4*, 161–180. Also in Murray A. Straus and Richard J. Gelles "Physical violence in American families: Risk factors and adaptations in violence in 8145 families". Transaction Books, 1989.

- Stets, J. E., & Straus, M. A. (1990). Gender differences in reporting of marital violence and its medical and psychological consequences. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 151–166). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A. (1992). Children as witnesses to marital violence: A risk factor for lifelong problems among a nationally representative sample of American men and women. In D. F. Schwartz (Ed.), *Children and violence: Report of the twenty-third Ross roundtable on critical approaches to common pediatric problems* (pp. 98–108). Columbus, OH: Ross Laboratories.
- Straus, M. A. (1999). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arriaga & S. Oskamp (Eds.), *Violence in intimate relationships* (pp. 17–44). Thousand Oaks, CA: Sage.
- Straus, M. A. (2001). *Beating the devil out of them: Corporal punishment in American families and its effects on children* (2nd ed.). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A. (2003). *Guide to the multidimensional neglectful behavior scales*. Durham, NH: Family Research Laboratory. Retrieved from <http://pubpages.unh.edu/~mas2>
- Straus, M. A. (2006). Cross-cultural reliability and validity of the multidimensional neglectful behavior scale adult recall short form. *Child Abuse & Neglect*, *30*, 1257–1279.
- Straus, M. A. (2008). *Traumatic and positive methods of correcting children's misbehavior: How to identify them clinically & how they are measured in a 40 nation collaborative study*. Paper presented at the Paper presented at the International Conference On Violence, Abuse and Trauma, Alliant University International, San Diego, CA. Retrieved from [https://pubpages.unh.edu/~mas2/DD08%20Traumatic%20%20Positive%20Methods%20-%20no%20extras-%20San%20Diego%20\[Compatibility%20Mode\].pdf](https://pubpages.unh.edu/~mas2/DD08%20Traumatic%20%20Positive%20Methods%20-%20no%20extras-%20San%20Diego%20[Compatibility%20Mode].pdf)
- Straus, M. A. (2009). The national context effect: An empirical test of the validity of cross-national research using unrepresentative samples. *Cross-Cultural Research: The Journal of Comparative Social Science*, *43*, 183–205. doi:10.1177/1069397109335770
- Straus, M. A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior*, *16*, 279–288. doi:10.1016/j.avb.2011.04.010
- Straus, M. A. (2013, November). *Relation to crime by university students in 15 Nations of corporal punishment by father-only, mother-only, and both parents*. Paper presented at the American Society of Criminology, Atlanta. Retrieved from <http://pubpages.unh.edu/~mas2>
- Straus, M. A. (2015). Dyadic concordance and discordance in family violence: A powerful and practical approach to research and practice. *Aggression and Violent Behavior*. doi:10.1016/j.avb.2015.04.011
- Straus, M. A., & Douglas, E. M. (Provisionally Accepted). Eight new developments, uses, and clarifications of the conflict tactics scales. *Journal of Family Issues*.
- Straus, M. A., Douglas, E. M., & Medeiros, R. A. (2014a). *The primordial violence: Corporal punishment by parents, cognitive development, and crime*. New York, NY: Routledge.
- Straus, M. A., Douglas, E. M., & Medeiros, R. A. (2014b). *The primordial violence: Spanking children, psychological development, violence, and crime*. New York, NY: Routledge.
- Straus, M. A., & Kaufman Kantor, G. (2005). Definition and measurement of neglectful behavior: Some general principles and guidelines. *Child Abuse & Neglect*, *29*, 19–29.
- Straus, M. A., & Mattingly, M. J. (2007). *A short form and severity level types for the parent-child conflict tactics scales*. Durham: Family Research Laboratory, University of New Hampshire. Retrieved from: <http://pubpages.unh.edu/~mas2>
- Straus, M. A., & Michel-Smith, Y. (2014). Mutuality, severity, and chronicity of violence by father-only, mother-only, and mutually violent parents as reported by university students in 15 nations. *Child Abuse & Neglect*, *38*, 664–676. doi:10.1016/j.chiabu.2013.10.004
- Straus, M. A., & Savage, S. A. (2005). Neglectful behavior by parents in the life history of university students in 17 Countries and its relation to violence against dating partners. *Child Maltreatment*, *10*, 124–135. doi:10.1177/1077559505275507
- Suitor, J. J., Pillemer, K., & Straus, M. A. (1990). Marital violence in a life course perspective. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 305–319). New Brunswick, NJ: Transaction.
- Taylor, C. A., Lee, S. J., Guterman, N. B., & Rice, J. C. (2010). Use of spanking for 3-year-old children and associated intimate partner aggression or violence. *Pediatrics*, *126*, 415–424.
- Taylor, C. A., Manganello, J. A., Lee, S. J., & Rice, J. C. (2010). Mothers' spanking of 3-year-old children and subsequent risk of children's aggressive behavior. *Pediatrics*, *125*, 1057–1065. doi:10.1542/peds.2009-2678
- Trocme, N., & Wolfe, D. A. (2001). *Canadian incidence study of reported child abuse and neglect: Selected Results Child Maltreatment in Canada* (pp. 1–52). Ottawa, Ontario: Minister of Public Works and Government Services Canada.
- U.S. Department of Health & Human Services. (2015). *Child maltreatment 2013: Reports from the States to the National child abuse and neglect data systems-National statistics on child abuse and neglect*. Washington, DC: Administration for Children & Families, U.S. Department of Health & Human Services.
- Widom, C. S. (1989). The cycle of violence. *Science*, *244*, 160–166.

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