



Child-to-Parent Violence: Examining Cumulative Associations with Corporal Punishment and Physical Abuse

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Abstract

Purpose Corporal punishment (CP) and physical abuse (PA) in childhood are associated with increased risk of child-to-parent violence (CPV). Without context of discipline (i.e., the intention of behavior change, and use of reasonable force), both CP and PA represent the use of physical force against a child. It is still unclear if their associations with CPV are similar when they co-occur, or when they occur in isolation. The current study examined the differential and cumulative association of different types of physical force in childhood with rates of CPV.

Method The sample consisted of 1,132 participants, between 18 to 87-years-old ($M = 50.95$, $SD = 14.24$) and included 59.5% female and 39.2% male participants who completed an online survey measuring CP, PA and CPV. Participants formed three groups: low CP or PA (group *low*), high CP only (group *HCP*), or high PA and CP (group *PA + CP*).

Results Two one-way ANOVAs with planned contrasts were conducted separately for CPV against mothers and fathers. The group *HCP* reported significantly higher CPV against both the mother and the father than group *low* and there was no significant difference between group *HCP* and group *PA + CP*.

Conclusions Higher rates of CP are associated with higher rates of CPV; however, this rate does not increase further when there is concurrent PA. This suggests that there may be a low sensitivity for retaliation from a young person, or coercive training (through high parent–child conflict), in environments where there is physical force from a parent.

Keywords Child-to-Parent Violence · Adolescent Family Violence · Corporal Punishment · Child Abuse · Parenting

Child-to-parent violence (CPV) is prevalent but understudied compared to other forms of family violence. CPV can be defined as a behaviour intended to cause psychological, physical, or financial damage to gain control and power over a parent (Cottrell, 2001). CPV is associated with several negative outcomes, such as strained parent–child relationships, and parental shame and despair (Clarke et al., 2017; Cottrell & Monk, 2004; Eckstein, 2004). In 2016, a Royal Commission into Family Violence in the Australian state of Victoria identified that there was a lack of community awareness regarding CPV, despite nearly 12,000 cases of CPV being recorded in Victoria between 2009 and 2014 (State of Victoria, 2016). Whilst CPV incidents represent

less than 10% of family violence incidents reported to Victorian police, this has increased by 12% between 2014 and 2019 (Phillips & McGuinness, 2020). Globally, between 5 and 21 percent of families will experience CPV, depending on how CPV is operationalised (Simmons et al., 2018).

Children may react to the discipline administered by a parent with violence (Gershoff, 2002). This may be particularly true for disciplinary strategies such as corporal punishment (CP) which uses physical force to cause pain but not injury (e.g., spanking, smacking), to control or correct behaviour (Straus & Donnelly, 2017). CP is prohibited in 63 countries, but is still legal Australia, America and Canada (End Corporal Punishment, 2021). Whilst CP attempts to achieve short-term control and compliance (Gershoff, 2002), it may lead to hostile retaliation from the child (i.e., CPV; Cottrell & Monk, 2004; Del Hoyos-Bilbao et al., 2019; Izaguirre & Calvete, 2017; Ulman & Straus, 2003). Adolescents are unlikely to report using physical CPV without experiencing physical aggression from parents (Margolin & Baucom, 2014). Izaguirre and

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Calvete (2017) demonstrated that the parent who administers CP is more likely to be the victim of CPV. However, this may only be the case for mothers, and not fathers (Lyons et al., 2015). Mothers are frequent victims of CPV (Cottrell, 2001; Ibabe & Jaureguizar, 2010), particularly single mothers (Simmons et al., 2019). While there is some evidence that fathers may more often experience abuse from sons (Simmons et al., 2019), overt aggression against the father, compared to the mother, are generally less frequently reported in the literature (Calvete et al., 2013; Suárez-Relinque et al., 2019). This may be because the mother spends more time with the child or is the parent who administers discipline (Cottrell, 2001; Gershoff, 2002; Ibabe & Jaureguizar, 2010; Ulman & Straus, 2003).

The context surrounding how CP is administered may also be important (Cano-Lozano et al., 2022). According to Larzelere (1986), when CP is administered as defined (e.g., use of reasonable force) and justification is given (e.g., the rules are explained to the child), it is less likely to be associated with CPV. However, no amount of justification can reverse the positive association between CP and CPV (Larzelere, 1986). Del Hoyo-Bilbao et al. (2019) found a positive, longitudinal relationship between CP and CPV even when the parent also provides positive parenting. Regarding other contextual indicators, there are inconsistencies as to whether parental warmth, impulsivity, justness and severity moderate the association between CP and CPV (Alampay et al., 2017; Cano-Lozano et al., 2022). Alampay et al. (2017) contests such moderating influence and suggests that frequent use of CP is harmful regardless of how it is implemented. Further, even low or minimal frequency of CP is associated with increasing CPV (Ulman & Straus, 2003). It may be that CP administered with justification mitigates some CPV but does not protect against it occurring. Without the contextual indicators though, CP may be observationally indistinct from physical abuse.

Childhood physical abuse (PA) is the intentional use of physical force (e.g., beating, kicking; Department of Health and Human Services, 2018) against a child which can result in injury, including harm to their health and dignity (World Health Organization, 2006). According to World Health Organisation (2014), 23% of children under 18-years-old globally report experiences of PA. A recent meta-analysis identified that children who had experienced PA were approximately 70% more likely to use CPV (either physical or psychological) than children who had not experienced PA (Gallego et al., 2019). Lyons et al. (2015) suggest that victims of PA were found to be around 5 times more likely to report CPV toward their mothers. The relationship between PA and CPV has been theorised to exist where CPV could be thought of by the child as a survival response, or as a means of seeking retribution in response to physical force by the parent (Cottrell & Monk, 2004; Ibabe, 2019).

CP and PA are observationally very similar, in that both involve physically striking a child. Many cases of PA begin as CP or are punishments which are too severe (Gershoff, 2010; Straus & Donnelly, 2017). They also have important definitional differences. PA is intended to cause harm and may result in nonaccidental injury, whereas per its definition, CP should implement 'reasonable' force and not cause lasting damage (Goodman et al., 2012). CP must also be used as punishment, whereas PA does not have this requirement. As such, PA may be associated with a greater severity of negative outcomes compared to CP. Ulman and Straus (2003) found PA was associated with a greater likelihood of experiencing CPV compared to CP. However, PA and CP often co-occur (Zolotor et al., 2008) and it may be that the effects on CPV are cumulative, as well as unique. King et al. (2018) identified that PA was almost never reported without concurrent CP and found that this combination yielded the highest reports of general reactive aggression, compared to only CP. Afifi et al. (2019) also found the combination of CP and child maltreatment (including PA) had the largest association with antisocial behaviour.

It remains unclear if these trends in general aggression will translate to CPV. General antisocial behaviour includes many different targets, whereas CPV is directed towards an authority who is often physically larger and holds greater relative power. Where there are other outlets for externalisation (e.g., sibling aggression), CPV may be withheld. CPV could also occur as immediate behavioural defiance to CP, which shares an inconsistent association with CP (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016). Nonetheless, it is understood that coercive patterns of exchange can develop within the parent–child dyad, where violence from both parties can become entrenched and normalised (Patterson, 1986). It is therefore necessary to understand how different forms of parental physical force may contribute to these patterns.

The current study aims to compare different categories of parental physical force on the outcome of CPV against the mother, and CPV against the father. Three groups will be formed and compared: adults who have experienced high amounts of both CP and PA (group *PA + CP*), adults who have experienced high amounts of CP without PA (group *HCP*), and adults who have experienced low or no amounts of CP or PA (group *low*). It is hypothesised that:

1. Group *HCP* will report a higher rate of CPV than group *low*, and
2. Group *PA + CP* will report a higher rate of CPV than group *HCP*

We will also explore whether the differences between these groups vary between CPV against the mother or the father.

Method

Participants

The sample consisted of 1132 Australian adults (59.5% female, 39.1% male, 1.3% other) aged between 18–87 years ($M = 50.95$, $SD = 14.24$). Twenty-eight (2.5%) participants identified as belonging to an Aboriginal and Torres Strait Islander group. Participants were recruited through targeted social media advertisements and were excluded if they were not over 18 years old and an Australian resident.

Measurement Instruments

Brief Physical Punishment Scale

Corporal punishment was measured through the Brief Physical Punishment Scale (BPPS; Österman & Björkqvist, 2007). Four items were measured on a 5-point Likert scale, ranging from 1 ('never') to 5 ('very often'), which represented the extent to which the participant had been pulled by the hair, pulled by the ear, hit with the hand, and hit with an object. Participants were specifically instructed to consider these experiences as punishments when responding. Participants had experienced less frequent CP if they scored below the mean and experienced more frequent CP if they scored above it (Björkqvist & Österman, 2014). The BPPS had good internal consistency in the current study ($\alpha = 0.82$).

Childhood Trauma Questionnaire – Short Form

Physical abuse was measured through four items (e.g., 'people in my family hit me so hard that it left me with bruises or marks') from the Childhood Trauma Questionnaire—Short Form (CTQ-SF; Bernstein et al., 2003) using a 5-point Likert scale, ranging from 1 ('never true') to 5 ('very often true'). We removed one item as it referred directly to physical punishment "I was punished with a belt, a board, a cord, or some other hard object". We classified participants as having had experienced low PA if they scored below the mean and experienced high PA if they scored above it. The scale had good internal consistency in the current study ($\alpha = 0.87$).

Conflict Tactics Scale

Child-to-parent violence was measured using an adapted version of the Conflict Tactics Scale (CTS; Straus, 2001). Six questions were used from the CTS including three verbal CPV (e.g., "Insulted and/or swore at your parents") and three physical CPV (e.g., "Slapped or punched your parents").

These items varied in severity and were rated on a 5-point Likert scale ranging from 0 ('never') to 4 ('very often'). Questions were administered separately across parent gender (CPV-Mother and CPV-Father), though, these data could not be linked to the gender of the parent administering the CP, as this variable was not stratified by gender. Verbal CPV had good internal consistency in this study for CPV-Mother ($\alpha = 0.72$) and CPV-Father ($\alpha = 0.77$). Physical CPV also had good internal consistency in this study for CPV-Mother ($\alpha = 0.71$) and CPV-Father ($\alpha = 0.75$). Verbal and physical CPV were combined into a latent CPV variable.

Procedure

After receiving ethics approval from the Deakin University Human Research Ethics Committee (ID: 2019–433), participants were recruited via a paid online advertisement. Participants accessed the online survey, hosted by Qualtrics, via a link provided by the advertisement. On average, it took participants 20 min to complete the survey. Following completion, participants could enter a draw to receive a gift card.

Results

Descriptive Statistics

Descriptive statistics for each group are presented in Table 1. Across all groups, participants reported higher mean scores of CPV-Mother than CPV-Father. Owing to generational risk factors such as systematic racism and colonization, Aboriginal and Torres Strait Islander peoples experience a disproportional amount of maltreatment in childhood (O'Donnell et al., 2010). We explored if there was unequal representation of participants who identified as Aboriginal and Torres Strait Islander across groups and found that these participants were slightly over-represented in the PA + CP group, $\chi^2 = 8.17$, $p = 0.017$.

Table 2 displays correlations between key variables. CP and PA scores were strongly and positively correlated ($r = 0.80$). CPV against the mother and CPV against the father were also highly positively correlated ($r = 0.48$).

Data Analysis

The CP, PA, and CPV-Father scale items all had less than 5% missing data. For the CPV-Mother scale, there was a substantial, but consistent number of missing values across items (e.g., 45.7% for 'shouted'). These data were not missing completely at random, $\chi^2(1, 40) = 183.05$, $p < 0.001$. Upon inspection of the survey tool, it may be that the presentation of CPV-Mother questions on mobile devices caused significant non-response, whereby participants had

Table 1 Key variables by group

	Low CP or PA (<i>n</i> = 529)		High CP only (<i>n</i> = 216)		High PA + CP (<i>n</i> = 387)	
	<i>M</i> (<i>SD</i>)	<i>n</i> (%)	<i>M</i> (<i>SD</i>)	<i>n</i> (%)	<i>M</i> (<i>SD</i>)	<i>n</i> (%)
Age	50.09 (15.43)		52.18 (13.50)		51.17 (13.08)	
Gender						
Female		327 (62.6)		111 (52.9)		224 (59.6)
Male		186 (35.6)		98 (46.7)		146 (38.8)
Other		8 (1.5)		1 (0.5)		6 (2.6)
CPV-Mother	3.28 (3.06) ^a		4.28 (3.38) ^a		4.11 (3.55)	
CPV-Father	2.34 (2.55) ^a		3.10 (3.29) ^a		3.40 (4.33)	
CP	6.65 (1.55)		11.53 (1.66)		13.90 (2.76)	
PA	4.95 (1.33)		6.46 (1.44)		12.82 (3.11)	

Child-to-parent violence (CPV), Corporal punishment (CP), Physical abuse (PA), ^aSignificant difference

Table 2 Correlations between key variables

Variables	1 Age	2	3	4
2 PA	.03			
3 CP	.05	.80**		
4 CPV-Mother	-.32**	.10*	.10*	
5 CPV-Father	-.25**	.11*	.15**	.48**

** $p < .01$, * $p < .05$, Child-to-parent violence (CPV), Corporal punishment (CP), Physical abuse (PA)

to unintuitively scroll across the screen to view these items. Any cases with missing data were removed from analyses. Following data cleaning, participants were allocated into one of the three groups based on their responses: group low (both CP and PA below the mean), group HCP (CP above the mean, PA below the mean), and group PA + CP (both CP and PA above the mean). The current study used a cross-sectional differential design, where pairwise planned comparisons were conducted to evaluate whether: (1) CPV mean scores in group low differed from group HCP, and (2) CPV mean scores in group HCP differed from group PA + CP. These comparisons were conducted for CPV against the mother and CPV against the father separately. We used a Bonferroni adjusted p -value of < 0.013 to account for the four planned comparisons (Armstrong, 2014).

Normality of the dependent variables was assessed through the Kolmogorov–Smirnov test and Shapiro–Wilk test, which both indicated a violation of normality across CPV-Mother and CPV-Father total scores ($p < 0.001$). To address this, a square-root transformation was performed to both variables. Levene’s test was not violated for the CPV-Mother transformed scores ($p = 0.276$), however variance across childhood physical force groups on CPV-Father remained significantly different once CPV-Father total scores were transformed ($p < 0.001$). Therefore, planned contrasts for the CPV-Father analysis were interpreted by not assuming equal variances. While PA and CP were highly

correlated ($r = 0.80$), the VIF values were all below 3 in exploratory regression analyses, suggesting that there was no multicollinearity.

ANOVA Analyses

Two one-way ANOVAs were conducted to evaluate whether CPV-Mother and CPV-father mean scores were significantly different across groups. For mothers, results revealed a significant overall effect, Welch's $F(2, 297.24) = 6.27, p = 0.002$. Planned pairwise comparisons revealed that individuals in group HCP ($M = 1.85$) had significantly higher mean scores of CPV-Mother than individuals in group Low ($M = 1.52$), $t(214.67) = 3.14, p = 0.002, d = 0.34$. There was no significant difference between group HCP and group PA + CP, $t(248.39) = -0.76, p = 0.447$. For fathers, there was a significant overall effect, Welch's $F(2, 522.44) = 5.91, p = 0.003$. Pairwise planned comparisons revealed that individuals in group HCP ($M = 1.43$) had significantly higher mean scores of CPV-Father than individuals in group Low ($M = 1.21$), $t(351.08) = 2.71, p = 0.007, d = 0.23$. Further comparisons did not reveal a significant difference between group HCP and group PA + CP ($t(479.30) = -0.17, p = 0.868$).

Discussion

The aim of the current study was to explore the differences between those who had experienced varying levels of childhood physical force on the rates of CPV. It was first hypothesised that group high corporal punishment (HCP) would report a higher prevalence of CPV than group low. This hypothesis was supported in both the mother and father models, where there was a significant difference between groups, though we note that this difference was small. This suggests that the frequency of CPV increases alongside the amount of corporal punishment experienced and is consistent with other literature in the area (e.g., Del Hoyo-Bilbao

et al., 2019; Pagani et al., 2004; Peek et al., 1985; Ulman & Straus, 2003). In some cases, incidents of corporal punishment may provoke a violent response from the young person, alternatively, or additionally, parents may resort to the use of physical punishment to try to control their young person's (potentially pre-existing) violent behaviours as a form of escalatory discipline.

The second hypothesis was that group high physical abuse and corporal punishment (PA + CP) would report greater CPV than group HCP. This was not supported in either model. Instead, we found that individuals who had experienced high levels of CP in childhood would likely use similar levels of violence towards a parent as an individual who has experienced high levels of both physical abuse and corporal punishment, suggesting physical abuse does not contribute to an escalation in CPV for young people who are also exposed to CP. When CP is applied as defined it occurs in the context of discipline. It is sometimes noted that, where the child understands this context, it could reduce the effect (comparative to PA) on their likelihood to respond with violence (Larzelere, 1986), as the transgression from the parent may be expected or more reasonable from the young person's perspective (depending on the developmental stage of the young person), compared to the unpredictable and unreasonable nature of PA. However, we did not observe this in the current study. Our findings go against past research on antisocial personality disorder behaviours (Affi et al., 2019), as well as general hostility and physical aggression (King et al., 2018), where combined CP and PA was a stronger correlate than CP alone, and suggests that the context of discipline is not influential beyond that of CP when considering CPV as an outcome. An environment of CP and PA, compared to CP alone, may be associated with increased displaced externalising, rather than retaliatory externalisations against the agent of the physical force. King et al. (2018) also demonstrated that CP was positively associated with violence outcomes in the young person, when controlling for other forms of maltreatment. Our findings support this unique effect between CP and aggression perpetration.

Despite this, an increase in physical force (i.e., CP with concurrent PA) still presents more opportunities for CPV which is in reaction or retaliation to violence. We did not observe evidence for this increase in opportunity translating into an increase in actual violence. Therefore, it may be that young people exposed to CP begin to learn to use violence which is void of provocation (i.e., proactive) (Baker et al., 2008; Polman et al., 2007). The motivation for violence may evolve from purely external sources to include internal drives as well (e.g., violence as a general problem-solving technique), and therefore the frequency becomes less tied to the presence of triggers such as discipline. Further, PA involves the use of more severe violence. The lack of difference in CPV between exposure groups suggests that

the threshold for coercive training or retaliation may be low and that the presence of physical force (in any context) facilitates the learning of violence as a viable conflict resolution strategy or means to achieve a social goal within the family unit.

The observed associations followed the same pattern for CPV against both the mother and the father. While the consideration of target parent gender was largely exploratory in the current study, we anticipated that the threshold for a violent reaction would be higher for CPV against the father (Lyons et al., 2015; Pagani et al., 2009), than the mother, as the father, on average, may present as a more formidable risk (due to their increased size and strength). It can be theorised from past literature that the increased likelihood of anger and injury associated with PA, compared to CP, may be what motivates the young person past the threshold for CPV toward the father (Cottrell & Monk, 2004; Gershoff, 2002), by eliciting a survival response (Cottrell, 2001; Ibabe, 2019; Ulman & Straus, 2003). However, we found no such pattern. It is important to note that the average level of CPV in our sample was lower for the father than the mother. Mothers are consistently reported to be the primary victims of CPV (Cottrell, 2001; Ibabe & Jaureguizar, 2010; Simmons et al., 2019). Corporal punishment is more often administered by mothers (Ulman & Straus, 2003) which may account for this discrepancy, where they are more often positioned as the target for retaliation. We were, however, unable to model this in the current study as the observations were not independent; future research should delineate the influence of which parent administers the CP on the likelihood of CPV.

Consistent with past literature (e.g., Fréchette et al., 2015; Gershoff & Grogan-Kaylor, 2016; King et al., 2018), we found that CP and PA were very likely to co-occur. There were few cases where high levels of PA were not accompanied by concurrently high CP, though high CP did not always attract high PA. Indeed, it is unlikely that a parent who is physically abusive would show restraint when correcting behaviour with discipline and it may be that the use of CP escalates into PA when the parent loses control (Graziano et al., 1996). In these cases, it may be very difficult to distinguish abuse from discipline, which speaks to the blurred line that accompanies the distinction of these two concepts (Baumrind et al., 2002; Gershoff, 2013; Straus & Donnelly, 2017). These high rates of co-occurrence, and the lack of difference in the association with CPV in the current study, provides more evidence for the conceptual indifference between PA and CP.

Limitations and Future Directions

Our findings are limited by the cross-sectional study design. The self-report method relied on retrospective recall of childhood experiences and the average age of participants

was 51 years. It is possible that participants may have had difficulty remembering childhood experiences in detail, which could have led to over- or under-reporting (Lyons et al., 2015). Future research should replicate this study using the reports of young people. However, we note the significant difficulty in measuring physical force from parents using this method. As the parent must provide consent for the young person to participate, it is unlikely that the sample will yield adequate numbers of young people experiencing high levels of abuse. Future enquiry could instead draw on substantiated abuse cases within a forensic population of young people.

Another limitation was that our findings provide narrow detail on the nature of CPV associated with parental physical force. We could not measure the function of the CPV reported. The use of CPV is motivated by different functions (Harries et al., 2022), for example: reactive (e.g., in response to punishment/provocation), and proactive (e.g., unprovoked, for tangible gain). The function of CPV has been demonstrated to affect the relevance of risk factors (Contreras et al., 2019, 2020). Within the current study, we could not identify if the CPV was reactive against the caregiver administering the CP. The parent may instead be using physical force to attempt to control proactive CPV. Such knowledge is crucial to effective intervention (McAdams, 2002) and should be considered in future enquires. We also did not differentiate between different forms of CPV (i.e., physical versus verbal). It may be that parental physical force is differentially associated with physical and verbal CPV (see supplementary table 1), however we lacked statistical power to explore this.

Finally, our results relate to an Australian sample. CP remains legal in Australia which may mean that such punishments are more likely to be perceived as normative, compared to countries where CP is criminalised. The perceived normativeness of CP is demonstrated to partially mitigate the positive association between CP and child aggression (Gershoff et al., 2010). The effects observed in the current study may therefore be smaller than what may be replicated in other countries where CP is banned. Nonetheless, the rates of CP in Australia are similar to that of other western countries (Straus, 2010), as are the average longitudinal associations between externalising problems and harsh parenting (Pinquart, 2021).

Conclusions and Implications

To our knowledge, this is the first direct comparison between the effects of CP and PA on CPV. Our findings suggest that the risk of CPV associated with childhood physical force does not differ between mothers and fathers; the use of physical punishments was associated with a similar level of risk of CPV as the same environment with concurrent

physical abuse. We also found that the experience of CP was associated with an increase in CPV (albeit a notably small increase). Other studies have demonstrated that there is a tendency for CPV associated with parental physical force to become reciprocal and bi-directional as the relationship deteriorates (Ibabe & Bentler, 2016). Further, the risk of CPV appears to accumulate the longer the young person is exposed to CP (Johnson & Giordano, 2013). It is therefore imperative to intervene early, before these coercive patterns become entrenched. Interventions in community, clinical, and forensic populations should focus on helping parents find alternatives parenting strategies to corporal punishment. This could be a focus of existing non-violent resistance training featured in some CPV interventions (Toole-Anstey et al., 2021; Weinblatt & Omer, 2008), or central to a shift from physical authoritarian parenting methods to strategies which present less risk of retaliation from the young person or coercive training.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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