

Experience of physical abuse in childhood and perpetration of physical punishment and violence in adulthood amongst fathers: findings from the Pacific Islands Families Study

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Abstract

Background: Family violence is a serious and increasingly significant public health issue, both in New Zealand and internationally. While Pacific families in New Zealand experience disproportionately higher rates of violence compared to their Palagi counterparts, little epidemiological information exists about the effect of childhood abuse on Pacific fathers and whether it increases their proclivity on perpetrating violence.

Aims: To determine the prevalence of physical discipline administered to young Pacific children by their fathers and physical intimate partner violence (IPV) perpetrated against their partners; and to relate this to fathers' recalled levels of paternal and maternal childhood physical abuse.

Methods: A cohort of Pacific infants born during 2000 in Auckland, New Zealand, was followed. At 6-weeks and 2-years postpartum, home interviews conducted for mothers and experience of IPV within the last 12 months was measured using the Conflict Tactics Scale. At 1-year and 2-years postpartum, home interviews conducted for fathers and acts of physical discipline were elicited. At the 1-year phase, childhood history of physical abuse was also elicited using the Exposure to Abusive and Supportive Environments Parenting Inventory. Crude and adjusted generalised estimating equation models were employed for statistical analyses.

Results: The sample included 786 partnered fathers who were living with their child at the 1-year measurement wave and 579 fathers at the 2-years measurement wave. Smacking children was common (25.0% at 1-year, 81.7% at 2-years) and hitting children with an object was not infrequent (1.4% at 1-year, 14.2% at 2-years). Physical IPV perpetrated by the father ranged from 23.1% to 27.5% while severe IPV was reported by 10.1% to 14.3% of partners. Fathers subjected to higher levels of paternal physical abuse in childhood were significantly more likely to physically discipline their child with smacking than those with lower levels of paternal physical abuse, after adjusting for confounding factors; as were fathers subjected to higher levels of maternal physical abuse. While not statistically significant, fathers subjected to higher levels of paternal or maternal physical abuse in childhood had estimated odds ratios greater than unity for all other physical violence measures captured compared to fathers with lower levels of paternal or maternal physical abuse.



Discussion: *Violence perpetrated by fathers on children and their partners appears common for many Pacific families in New Zealand. These findings highlight the deleterious effect of paternal and maternal physical abuse in childhood on subsequent physical violence and IPV in adulthood. To break this inter-generational cycle of violence, culturally targeted and specific approaches are needed to negate this complex and damaging phenomena.*

Introduction

The seriousness of family violence is recognised by international organisations, conventions and documents, including: World Health Organization violence publications;¹ United Nations Convention on the Rights of a Child; and United Nations Declaration of the Elimination of Violence against Women.² The New Zealand Government also recognises family violence as a priority issue.³ As such, physical abuse of children by their parents or caregivers is widely regarded as being unacceptable and illegal in most societies.⁴ However, approximately, 4–8% of New Zealand children experience physical abuse at some time,³ with New Zealand's Child, Youth and Family Service reporting that they received an average of 230 notifications of child abuse or neglect daily.⁵ Such abuse can lead to juvenile offending, substance abuse, mental health problems, injuries, and even death.⁶ Moreover, children who have been physically abused in childhood are more likely than non-abused child to engage in subsequent violent behaviour in adulthood; at least among males.⁷ In 2006, 76% of persons convicted of assaulting a child were men.⁸

Parent-to-child family violence has been found to predict both perpetration and victimization for males.⁹ Men who experienced childhood physical abuse were approximately four times as likely to perpetrate non-reciprocal intimate partner violence (IPV) compared to those with no such childhood history.¹⁰ Men who experienced severe childhood physical abuse, witnessed interparental threats or physical violence, or experienced severe child-family violence were more than twice as likely to engage in reciprocal IPV compared to men with no history of childhood family violence.¹⁰ A male history of moderate child physical abuse or moderate child-family violence was also positively associated with an increased risk of reciprocal IPV.¹⁰ In a meta-analysis, weak to moderate associations were demonstrated between witnessing or experiencing family-of-origin violence and engaging in subsequent domestic violence, either as a perpetrator or as a victim.¹¹ No differential effects were found from witnessing or experiencing family-of-origin violence on perpetration, but experiencing such violence was more predictive of victimization than was witnessing violence.¹¹ More recently it was reported that men who witness intimate partner violence in childhood are more likely to commit such acts in adulthood, compared with men who are otherwise similar with respect to a large range of potential confounders.¹²

Not only are these men more likely to commit acts of violence towards their partner, but also towards their children. A review of 31 studies on the overlap of domestic violence and child maltreatment found high co-occurrence rates of between 30% and 60% in the majority of studies examined.¹³ A similar set of studies investigating domestic violence and child physical abuse were reviewed and identified a co-occurrence rate of about 40%, using conservative criteria for defining child abuse.¹⁴ Thus the deleterious sequela of childhood abuse ripple through generations of families.¹⁵

Within the New Zealand context, settlement first occurred around 1200-1300 AD when the North Island was discovered by the ancient Polynesians; now known as the New Zealand indigenous Māori.¹⁶ Major European settlement, and subsequent colonisation, commenced from the late 18th century. A second wave



of Polynesian migration occurred between the 1950s and 1980s. This modern Polynesian migration was based principally on opportunity provided by largely economic imperatives in New Zealand,¹⁷ or economic sustainability of small island groups such as the Tokelaus.^{18,19} Migration has been supplemented more recently by kinship and family motivators. At the 2006 Census, Pacific people in New Zealand numbered 266 000 and comprised 6.9% of the population.²⁰ Samoans constitute the largest ethnic group (49.2%), followed by Cook Island Māori (21.8%), and Tongans (19.0%); 60.0% were born in New Zealand; and 65.8% lived in the Auckland urban area.²⁰ This ethnic diversity is manifest in differing cultures, languages, and strength of acculturation.²¹

Since the migration wave of the late 20th century, Pacific people have actively participated in the New Zealand economy and society. In economic terms, Pacific people have relatively high labour force participation rates in the declining manufacturing sector and the growing consumer service industries (such as hotels, restaurants and retail).²² While younger Pacific people are being employed in more skilled technical and professional occupations, Pacific people generally remain under-represented in managerial and professional occupations yet over-represented in trades and elementary occupations.²² Current labour force participation rates for people of Pacific ethnicities are at 60.8%, lower than the national rate of 68.1%, and unemployment rates are at 14.0%, higher than the national rate of 6.5%.²³ In terms of demography, Pacific people living in New Zealand have a relatively young age structure, a high fertility rate, and a lower life expectancy than the total population.²⁴ Compared to the national population, Pacific people are more likely to be in the lower income bands, even after age standardisation. Geographically, Pacific people's choice of residential locations was primarily driven by migration history and economic imperatives, mainly to low socio-economic status neighbourhoods. These drivers continue to persist, along with maintenance of kinship and family ties. Consequently, the location of Pacific families remain concentrated in relatively deprived mixed-ethnicity urban areas, with the major concentrations in the sprawling central, western and southern suburbs of greater metropolitan Auckland and Wellington.

Pacific people are over-represented in many adverse social, health, and economic statistics relating to unemployment, housing, crime, income, education and nutrition.^{21,24,25} Such statistics have significant consequences for Pacific families given that socioeconomic disadvantage has been consistently linked with negative health outcomes, including violence.^{26,27} There is a growing recognition that issues which have a significant impact on Pacific people's lives need to be understood, of which family violence stands out.^{5,8,28}

Recent findings suggest that smacking is a widespread form of discipline administered to Pacific children, and hitting with objects is common.²⁹ Moreover, fathers are more likely to employ harsher punishment than mothers.²⁹ IPV is common for many mothers of Pacific children,⁸ and is associated with significantly more general practitioner visits for exposed children.³⁰ While Pacific mothers described their own mothers as both more physically and emotionally abusive than fathers and more loving and supportive than fathers,³¹ paternal physical abuse was the only statistically significant risk factor from childhood parenting history that was independently associated with severe physical perpetration and victimization within the Pacific mother's current intimate partner relationship.³²

Beyond these findings, little empirical information exists within New Zealand about violence in Pacific families, especially from the male perspective growing up in an abusive household, on which to base targeted, culturally appropriate health promotion messages or interventions. As part of a large Pacific birth



cohort,^{33,34} this study aims to relate fathers' recollected childhood experience of paternal and maternal violence towards them to their own self-report of physical punishment to their children and their partners report of physical intimate partner violence directed towards them. Should a significant relationship be found, then a secondary aim was to investigate whether important differences existed between ethnic and acculturation groups, after adjusting for confounding factors.

Methods

The Pacific Islands Families Study (PIFS) follows a cohort of Pacific infants born at Middlemore Hospital, South Auckland, between 15 March and 17 December 2000. Detailed information about the cohort, and its recruitment and retention procedures is described elsewhere.^{33,34} In brief, all potential participants were selected from live births where at least one parent was identified as being of Pacific Islands ethnicity and a New Zealand permanent resident. Information about the study was provided to all potential participants and consent was sought to make a home visit.

Approximately six-weeks after infants' births, female interviewers of Pacific Islands ethnicity who were fluent in English and a Pacific Islands language visited mothers in their homes. Once eligibility was confirmed and informed written consent obtained, mothers participated in interviews of approximately 90 minutes concerning family functioning and the health and development of the child. When the children reached their first and second birthdays all maternal participants were re-contacted and revisited by a female Pacific interviewer. Again, written consent was obtained before the interview was conducted. At the time of the 1-year and 2-years postpartum interviews, mothers were asked to give permission for a male Pacific interviewer to contact and interview the father of the child. If permission and paternal contact details were obtained, then a male Pacific interviewer contacted the father to discuss participation in the study. Once informed written consent was obtained from the father, the interview was conducted.

Measures of violence

Childhood history of physical abuse: The measurement of childhood history was based on the Exposure to Abusive and Supportive Environments Parenting Inventory (EASE-PI).³⁵ The 70 item EASE-PI contains six scales derived through replicated factor analyses, which measure retrospective accounts of exposure to parental behaviours that are physically abusive, emotionally abusive, sexually abusive, loving and supportive, promoting of independence/self individuation, and provide positive modeling and fairness. For the purposes of this study, 7 items were selected from the physical abuse scale. Selection was based on the item having a factor loading of 0.50 or greater with the factor to be measured, namely: "Threw things at you" (factor loading weight 0.73); "Pulled your hair" (factor loading weight 0.75); "Your parents broke or smashed objects near you when angry with you" (factor loading weight 0.67); "Pushed, grabbed or shoved you" (factor loading weight 0.60); "Hit you" (factor loading weight 0.56); "Hit you with objects" (factor loading weight 0.51); and "Beat you up" (factor loading weight 0.70). Participants were asked to rate how frequently each activity occurred during their childhood (with response options: never (0), rarely (1), sometimes (2), often (3), very often (4)). Overall weighted scores were then calculated and standardized across the [0, 100] interval, where 0 represents minimal abuse and 100 represents maximal abuse. The authors state that this measure was designed to assess important aspects of the parent-child environment, including behaviours which were independently deemed to be abusive, but which may or may not be experienced as abusive by a particular individual.³⁵ There is no assumption as to the existence of trauma as a result of exposure or that exposure to the behaviours constitutes abuse *per se*. Cronbach's α reliability values for the maternal and paternal physical abusiveness scores were 0.85 and 0.85, respectively.



Physical punishment: Physical punishment of the child was assessed at the 1-year and 2-years interview from the Parent Behaviour Checklist questions “I smack my child” and “I hit my child with an object (such as a spoon or belt)”.³⁶ Responses are elicited on a 5-point scale: never/almost never; monthly; fortnightly; weekly; daily/almost daily. For the purpose of these analyses, the variables were dichotomised into: no (never/almost never response) and yes (all other responses) categories.

Intimate Partner Violence (IPV): The experience of physical IPV was measured using Form R of the Conflict Tactics Scale (CTS) developed by Strauss.³⁷⁻³⁹ Arguably, the CTS is the current dominant instrument for assessing violence among couples.⁴⁰ Mothers were asked to enter their responses on an answer sheet while the interviewer read out the questions and report about their partner’s behaviour towards them. The CTS measure of verbal aggression includes six items; the minor physical violence scale includes three items; and the scale of severe physical violence includes six items. An individual was considered to be a victim of verbal aggression, minor physical violence, or severe physical violence if they reported that a partner subjected them to any of the behaviours during the past twelve months. For the purpose of this paper, we report any physical violence (which is indicated if minor or severe physical violence is admitted) and severe physical violence. Psychometric properties of the CTS scales are robust and have been described by Straus.⁴¹ Responses were included in these analyses if participants completed at least 13 of the 15 CTS items.

Demographics and other variables

At each measurement wave the PIFS includes a suite of questions and, where possible, standardized instruments that are considered relevant and appropriate by both researchers and the Pacific community. Smoking status was assessed using one specific question “On average, how many cigarettes did you smoke yesterday”. Participant responses to this question were dichotomised into “current smoker” and “non-smoker” smoking status groups. Alcohol consumption was assessed using the Alcohol Use Disorders Identification Test (AUDIT), which elicits quantity and frequency and provides an indication for potential problem drinking.^{42,43} Acculturation was conceived and measured based on Berry’s bi-directional model.⁴⁴ The acculturation instrument chosen for the PIFS was an adaptation of the General Ethnicity Questionnaire (GEQ).⁴⁵ To suit the specific purposes of the PIFS, the scale was shortened and modified thereby developing the Pacific (PIAccult) and New Zealand (NZAccult) versions of the GEQ.⁴⁶ Each of the respondents was individually scored on both the PIAccult and NZAccult scales and allocated to one of the categorical classes dependent on whether their individual score fell above or below the median of the full group on each scale, namely: Separator (Low New Zealand – High Pacific); Integrator (High New Zealand – High Pacific); Assimilationist (High New Zealand – Low Pacific); Marginalist (Low New Zealand – Low Pacific). The internal consistency of the measure was also examined, using Cronbach’s α , and was found to be acceptable ($\alpha=0.81$ and 0.83 for the NZAccult and the PIAccult scales, respectively).⁴⁶

Statistical analysis

Paternal responses to all singleton and first-born from multiple birth infants and where fathers were living with the child and child’s mother at the 1-year measurement wave were included in the analyses. Separate binomial generalized estimating equation (GEE) models, using an unstructured correlation matrix and robust Huber–White sandwich variance estimators, were used to model the four binary violence variables (smacking, hitting, any physical IPV, and severe physical IPV) over time. Time is defined to be time postpartum (or child’s age). As trends over time could not be assumed to be linear, and time itself is such a vital component in these longitudinal analyses, all analyses included time as a classification variable.



Statistical significance of the childhood history of physical abuse variables was assessed based on the Type III score statistic and the Wald's χ^2 test. All analyses were performed using SAS version 9.2 (SAS Institute Inc., Cary, NC, USA), figures drawn using Stata version 10.0 (StataCorp, College Station, TX, USA), and $\alpha = 0.05$ defined statistical significance for all tests.

Ethics

Ethical approval was obtained from the National Ethics Committee, the Royal New Zealand Plunket Society and the South Auckland Health Clinical Board.

Results

In total, 825 fathers were interviewed at the 1-year measurement wave and 757 were interviewed at the 2-years measurement wave. Of these, 786 (95.3%) fathers were living with the child and child's mother at the 1-year measurement wave and eligible for inclusion in this analysis; as were 579 (76.5%) fathers from the 2-years measurement wave. Socio-demographics and variables associated with violence for this eligible sample of fathers in the Pacific Islands Families Study (PIFS) at the 1-year postpartum measurement wave is included in Table 1. Non-Pacific fathers were included within the PIFS if their partner identified themselves as being of Pacific ethnicity.

Table 1. Socio-demographics and variables associated with violence for the eligible sample of fathers in the Pacific Islands Families Study (PIFS) at the 1-year postpartum measurement wave.

	n (%)
<i>Age (years)</i>	
<25	91 (11.6)
25-29	199 (25.4)
30-34	233 (29.7)
35-39	149 (19.0)
≥40	112 (14.3)
<i>Ethnicity</i>	
Samoan	420 (53.4)
Tongan	195 (24.8)
Cook Islands Māori	68 (8.7)
Other Pacific	50 (6.4)
Non-Pacific	53 (6.7)
<i>Marital status</i>	
Married	635 (80.8)
De facto	151 (19.2)
<i>New Zealand born</i>	
Yes	180 (22.9)
No	605 (77.1)
<i>Highest educational qualification</i>	
No formal qualification	463 (59.1)
Secondary	204 (26.0)
Post-secondary	117 (14.9)
<i>Current smoking status</i>	
Non-smoker	471 (60.0)
Smoker	314 (40.0)
<i>Problem drinking (AUDIT)</i>	
No	610 (77.7)
Yes	175 (22.3)
<i>Acculturation status</i>	
Integrator	106 (13.6)



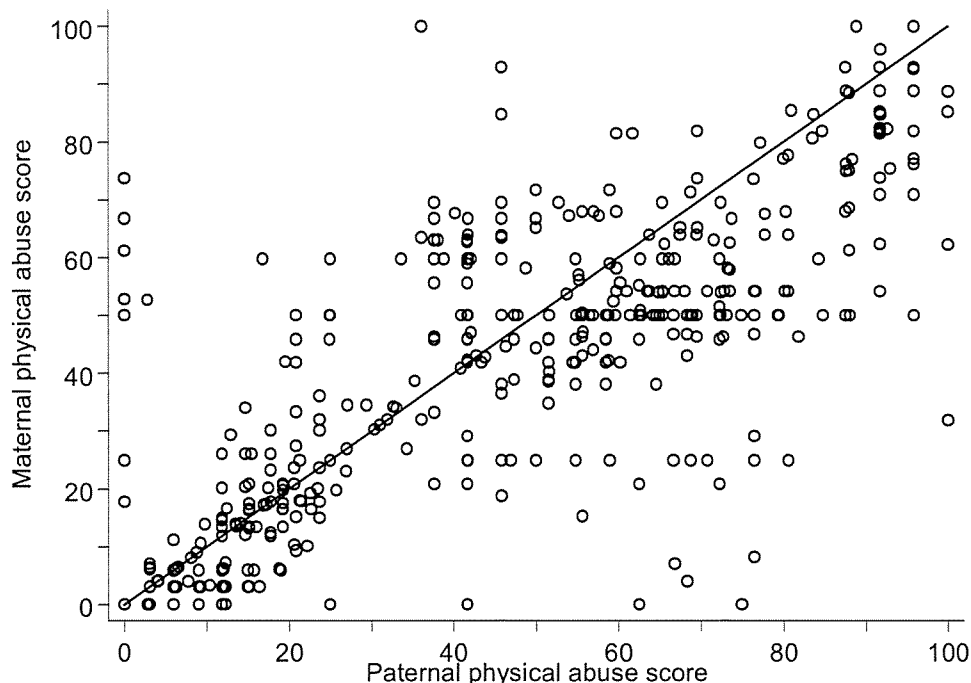
Assimilationist	271 (34.8)
Separationalist	309 (39.7)
Marginalist	92 (11.8)
<i>Household income (NZD)</i>	
≤\$20,000	189 (24.0)
\$20,001-\$40,000	477 (60.7)
>\$40,000	101 (12.8)
Unknown	19 (2.4)

Many of the socio-demographics are broadly representative of New Zealand Pacific figures, although fewer Cook Island Māori are captured than could be expected, and fewer are New Zealand born than the greater Pacific population resident in New Zealand.²⁰ The majority (59.1%) had no formal educational qualification, 40.0% smoked, nearly one quarter (22.3%) were classified as having a potential alcohol problem, and most had a household income (in 2001 New Zealand dollars) between \$20,001-\$40,000.

Recall of paternal and maternal physical abuse

In total, 742 (94.4%) fathers provided valid response to the paternal physical abuse scale, with median 24.3 ($Q_1=5.9$, $Q_3=62.6$). Similarly, 784 (99.7%) fathers provided valid response to the maternal physical abuse scale, with median 25.0 ($Q_1=3.1$, $Q_3=50.0$). A high correlation between recalled paternal and maternal physical abuse was observed (Spearman's $\rho=0.85$). A scatter plot of paternal and maternal physical abuse scores, together with the line of equity, appears in Figure 1.

Figure 1. Scatter plot of paternal and maternal physical abuse scores, together with the line of equity.



When splitting these physical abuse scores around their median, 333 (45.4%) fathers recalled lower levels of paternal and maternal physical abuse, 346 (47.2%) fathers recalled higher levels of paternal and maternal physical abuse, 18 (2.5%) fathers recalled higher levels of paternal physical abuse and lower levels of



maternal physical abuse, and 36 (4.9%) fathers recalled lower levels of paternal physical abuse and higher levels of maternal physical abuse. The asymmetry between fathers recalling higher levels of paternal physical abuse and lower levels of maternal physical abuse and fathers recalling lower levels of paternal physical abuse and higher levels of maternal physical abuse was statistically significant (McNemar's test, $p=0.01$)

Acts of physical violence

Smacking and hitting children with an object were elicited at the 1-year and 2-years postpartum measurement waves from the father, and respective frequencies reported appear in Table 2. Both self-reported measures of physical violence are common in this sample, and there is a strong age-dependency – with both behaviours occurring more frequently when the child is aged 2 years compared to that when aged 1 year.

Table 2. Frequencies (percentage) of physical discipline fathers self-reported in administering to children at 1-year and 2-years postpartum, and acts of physical intimate partner violence perpetrated against partners at 6-weeks and 2-years postpartum (reported by partner).

	N	n (%)
<i>Smacking</i>		
1-year postpartum	785	196 (25.0)
2-years postpartum	579	473 (81.7)
<i>Hitting with an object</i>		
1-year postpartum	785	11 (1.4)
2-years postpartum	577	82 (14.2)
<i>Perpetration of any physical IPV</i>		
6-weeks postpartum	746	172 (23.1)
2-years postpartum	659	181 (27.5)
<i>Perpetration of severe physical IPV</i>		
6-weeks postpartum	746	75 (10.1)
2-years postpartum	659	94 (14.3)

Fathers' perpetration of any physical intimate partner violence and severe intimate partner violence was elicited from their partners at 6-weeks and 2-years postpartum. The resultant respective frequencies also appear in Table 2. Levels of any and severe IPV are common in this group. Moreover, the elicited frequencies at the 2-years measurement wave appear higher than those at the 6-weeks measurement wave.

Relating levels of recalled paternal and maternal physical abuse to acts of physical violence

Results from the four separate crude GEE models, each including a nominal categorisation of time, appear in Table 3. Recalled paternal and maternal physical abuse scores, split around their median, were not significantly related to hitting of the child with an object, or perpetration of any or severe physical PIV. In each of these analyses, those with higher physical abuses scores yielded estimated ORs that were greater than unity, but the variability associated with these estimates rendered them non-significant. In contrast, both paternal and maternal physical abuse scores, split around their median, were significantly related to self-reported smacking of the child – with those experiencing higher levers of physical abuse having a greater likelihood of smacking. Subsequent analysis of this smacking variable revealed that compared to fathers with lower recalled levels of paternal and maternal physical abuse, those with higher recalled levels of paternal and maternal physical abuse were 1.85 (95% CI: 1.38, 2.47) times as likely to smack their child, those with higher recalled levels of paternal and lower recalled levels of maternal physical abuse were 1.53 (95% CI: 0.57, 4.16) times as likely to smack their child, and those with lower recalled levels of paternal and



higher recalled levels of maternal physical abuse were 1.41 (95% CI: 0.73, 2.75) times as likely to smack their child.

The relationship between recalled paternal and maternal physical abuse scores and smacking was re-analysed in a GEE model adjusted for all the variables listed in Table 1. The significant crude association remained significant in these adjusted analyses. Fathers subjected to higher levels of paternal physical abuse were 1.53 (95% CI: 1.01, 2.33) times as likely to smack their child than those subjected to lower levels of abuse; and fathers subjected to higher levels of maternal physical abuse were 1.63 (95% CI: 1.07, 2.46) times as likely to smack their child than those subjected to lower levels of abuse. Repeating the analysis that simultaneously considered both parents; compared to fathers with lower recalled levels of paternal and maternal physical abuse, those with higher recalled levels of paternal and maternal physical abuse were 1.68 (95% CI: 1.06, 2.66) times as likely to smack their child, those with higher recalled levels of paternal and lower recalled levels of maternal physical abuse were 1.39 (95% CI: 0.45, 4.33) times as likely to smack their child, and those with lower recalled levels of paternal and higher recalled levels of maternal physical abuse were 1.31 (95% CI: 0.62, 2.75) times as likely to smack their child.

Table 3. Crude odds ratios (ORs), associated 95% confidence intervals (95% CI) and p-values of generalized estimating equation (GEE) models relating paternal and maternal childhood physical abuse scores dichotomized around the median to acts of physical discipline self-reported by the fathers and IPV reported by their partners.

Physical abuse	Physical discipline of child						Perpetration of IPV					
	Smacking			Hitting			Any physical violence			Severe physical violence		
	OR	(95% CI)	P-value	OR	(95% CI)	P-value	OR	(95% CI)	P-value	OR	(95% CI)	P-value
<i>Paternal</i>			<0.001			0.17			0.18			0.69
Lower	1.00	(reference)		1.00	(reference)		1.00	(reference)		1.00	(reference)	
Higher	1.77	(1.34, 2.35)		1.37	(0.87, 2.16)		1.20	(0.92, 1.57)		1.08	(0.75, 1.55)	
<i>Maternal</i>			<0.001			0.22			0.17			0.55
Lower	1.00	(reference)		1.00	(reference)		1.00	(reference)		1.00	(reference)	
Higher	1.83	(1.39, 2.40)		1.32	(0.84, 2.08)		1.20	(0.92, 1.55)		1.11	(0.78, 1.59)	



Discussion

In this large study of fathers with Pacific children, smacking of children and physical IPV of partners was common. Arguably more vexing is that hitting of 2-year old children with objects and severe physical IPV of partners within the first 2-years postpartum were reported in 10.1% to 14.3% of the sample. As parents are most likely to use physical punishment when children are between 3 and 4 years of age,⁴⁷ beyond the age range of this study, the prevalence of smacking and hitting of these children are likely to be higher as the children age. These figures demonstrate that many Pacific family members experience acts of severe physical violence perpetrated by their father. Not usually publically reported, information from the New Zealand Police Family Violence Database about incidents of family violence in 2006 revealed that the majority of offenders recorded were male (81%) and that Pacific people accounted for 10% of all victims and 12% of all offenders.⁸ Given that Pacific people comprised 6.9% of the New Zealand population at the 2006 Census,²⁰ this forcefully demonstrates that Pacific families are subject to an excess of violence – both as victims and as perpetrators.

Should we be surprised by these findings? There is considerable evidence which demonstrates that societies with more social, health and economic inequalities are more likely to have higher rates of violence.^{26,27} It has been argued that these inequalities, and the stress they cause, increase the risk for vulnerable people and communities to resort to violence on themselves, women and children.^{27,48} Given that Pacific people are over-represented in many adverse social, health and economic statistics,^{21,24,25} the excess of violence findings found within this study could thus be expected – especially in a country with large and increasing economic divides.^{27,49} It should also be noted that most Pacific fathers in this study did not hit their children with objects nor perpetrated severe physical IPV on their partners.

With childhood history of physical abuse scores dichotomised around the median, fathers subjected to higher levels of paternal physical abuse were significantly more likely to physically discipline their child with smacking than those with lower levels of paternal physical abuse, OR 1.53 (95% CI: 1.01, 2.33), after adjusting for confounders including problem drinking status, smoking status, household income, acculturation status and highest educational attainment status. Similarly, fathers subjected to higher levels of maternal physical abuse in childhood were also significantly more likely to physically discipline their child with smacking than those with lower levels of maternal physical abuse, OR 1.63 (95% CI: 1.07, 2.46), after adjusting for confounders. These effects were not independent, as fathers subjected to higher levels of maternal and paternal physical abuse in childhood were 1.68 (95% CI: 1.06, 2.66) times as likely to physically discipline their child with smacking than those with lower levels of maternal and paternal physical abuse, after adjusting for confounders. While not statistically significant, fathers subjected to higher levels of paternal or maternal physical abuse in childhood had estimated ORs greater than unity for all other physical violence measures captured compared to fathers with lower levels of paternal or maternal physical abuse (see: Table 3).

In a qualitative study of in-depth interviews conducted with 37 (12 Pacific) male perpetrators of IPV, it was found that violence was considered the norm within the environments they grew up in for most Island-born and some New Zealand born Pacific men.⁵⁰ Most conceded that their attitudes and behaviours towards family violence may have been influenced and shaped by the settings they grew up in – whether in New Zealand or in the Pacific.⁵⁰ Also, there are issues and clashes of cultural and legal norms associated with migration. For example, some Pacific cultures place men at the head of the family, the 'pule' (authority) and that with this comes the right to make final decisions for the family. Difficulties can arise when men perceive or experience conflict between norms and values in their home country and those encountered in New



Zealand, and they are unable to set and reinforce assumed 'rules' because of New Zealand laws.⁵⁰ These difficulties, coupled with the normalisation of violence, may partially contribute to the disproportionately high rates of violence recorded for Pacific families.⁸

Fathers are particularly aware of the negative impact on children who are exposed to violence within the household.⁵⁰ A particularly common motivation to stop using violence, reported by Pacific men, was the desire to be good role models for their children.⁵⁰ This suggests that programmes targeting Pacific men should utilise this desire in motivating behaviour change. However, Kwong and colleagues suggest that abusive parental behaviours may be transmitted across generations in a general way but that specific connections between abusive parental behaviours and perpetration or victimization of subsequent severe partner violence may be difficult because of the high reciprocity of both physical and psychological abuse.⁵¹ These authors suggest that although associations between most types of family violence and subsequent relationship violence can be found, as demonstrated in this paper, they are not strong and that social learning theory may be only a small part of a very complex picture. Nonetheless, understanding Pacific families and the epidemiology around violence will help paint some of this complex picture upon which culturally appropriate programmes may be developed.

While the PIFS has many salient strengths,^{33,34} a major weakness for this study is its reliance on retrospective recall. Paternal recollection of childhood paternal and maternal physical abuse may be subject to recall bias; distorted due to memory inaccuracies or other psychological processes such as repression or dissociation,⁵² and social desirability bias. However, while corroborative evidence of reported parental behaviours would be useful, it has been argued that the accuracy of specific events of violence or abuse may not be as important as are people's perceptions of events or what those events meant to them.⁵³ Notwithstanding, a study of self-reported childhood physical abuse among 2,256 participants using surveys administered in 1995 and 2000 found reliability of recall was fair to moderate.⁵⁴ The derivation of childhood paternal and maternal physical abuse categorisations around their median split of the overall weighted scores also limits the interpretability of this abuse measure. Ideally, a psychometrically robust measure of recalled childhood abuse would have good interpretability, with meaningful abuse-level categorisations, and could be used to capture both prevalence and severity. Similarly, while a useful and commonly employed tool for assessing IPV in epidemiological studies, the brief CTS instrument is not without fault.^{55,56} The CTS uses 12-month retrospective self-report of IPV, which may suffer from recall bias and subjective or selective interpretations of violence. Its validity in Pacific populations is currently untested and so Pacific people's perceptions and interpretations of IPV may not be accurately captured by this instrument. Furthermore, the CTS instrument does not identify who initiated the violence, the intention, context and motivation of the violence nor does it provide information on the cause, complexity or consequence of IPV.^{55,56} Research suggests that the consequences of partner violence differs between men and women, as does the motivations for perpetrating it. Women are more likely to be injured, suffer more severe forms of violence, and where violence by women occurs, it is more likely to be in the form of self-defence.²⁸ The reliance on self-reports of discipline behaviours may also be subject to recall and social desirability biases, with fathers reporting behaviours in a way they believe to be socially acceptable or appropriate rather than accurate. However, we believe the repeated face-to-face home interviews undertaken by Pacific gender-matched interviewers should minimise these biases.²⁹



As stated by Kreg and colleagues in the 2002 World Report on Violence and Health, “The importance of primary prevention of violence by intimate partners is often overshadowed by the importance of the large number of programmes that, understandably, seek to deal with the immediate and numerous consequences of violence”.²⁸ Accumulated evidence from this and previous studies suggest that paternal and maternal physical abuse in childhood is linked to an increased likelihood of men to perpetration physical violence on their child and partners in many communities, including the Pacific community. Thus, there is a challenge and need to develop and disseminate culturally appropriate education and intervention programs to meet the needs of New Zealand’s different communities and break this intergenerational cycle of violence. Targeting new Pacific fathers may be one useful entry point in breaking this cycle. Indeed, effective parenting was explicitly discussed at the “Pacific Champions of Change: National Fono on Stopping Violence”, as one strategy to reduce the prevalence amongst Pacific families.⁵⁷ Also, because of the diversity of Pacific communities, a one size fits all approach may not be best but rather a localised or regional approach with tailored strategies for different communities and settings.^{57,58}

Pacific people face a myriad of important and substantial social and economic pressures affecting their health. Set against this over-arching backdrop of ethnic inequalities, any focused violence intervention strategy is likely to have limited population-level impact or success until the inequalities have been negated. There are both national and international calls to urgently, and as a matter of priority, reduce these inequalities.^{59,60} However, while these inequalities remain, the vulnerable are likely to continue to suffer the most.

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*"Only one who devotes himself to a cause
with his whole strength and soul can be a true master.
For this reason mastery demands all of a person."*

Albert Einstein

