

Comparison of Parent and Child Reports on Child Maltreatment in a Representative Household Sample in Hong Kong

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Published online: 28 December 2011

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Abstract This study investigated and compared the rates of child maltreatment as reported by parents and children. Self-reports of 1,093 children aged 12 to 18, which were matched with both parents' records, were compared and analyzed in the study. The levels of agreement between parent and child reporting of various kinds of parental child maltreatment were low to moderate. Factors affecting the disagreement in reports were also investigated. Social desirability and violence approval were the common predictors of disagreement in father-child and mother-child reports, respectively. The low agreement between parent-child reports found in the present study highlights the need for the inclusion of both parent and child reports on maltreatment in future clinical screening and intervention programs.

Keywords Child maltreatment · Parent report · Child report · Reporting · Agreement

Abundant evidence has shown that child maltreatment, including various types of child abuse and neglect, is prevalent worldwide. The prevalence of child maltreatment has been well-documented in Western countries. In the U.S. and European countries, the prevalence rates range from 5% to 50% for physical abuse, from 1% to 36% for sexual abuse, and around 40% for child neglect (Hussey et al. 2006; Lampe 2002). When only severe child maltreatment is considered, May-Chahal and Cawson (2005) have found a lifetime prevalence in the U.K. of 7% for severe physical

assault, 6% for severe emotional abuse, 11% for severe sexual abuse, and 5–6% for absence of care and supervision.

Child maltreatment receives less attention in Eastern countries than in the West (Wong et al. 2009). Despite this lack of research interest, studies have shown that child abuse is not a rare phenomenon in Chinese societies, with the occurrence rates generally resembling those found in Western studies. Existing findings have shown that minor physical abuse is inflicted against 10% to 23% of children, and severe to very severe physical abuse occurs among 3% to 15% of children in Chinese societies including China, Taiwan, and Hong Kong (Shen 2006; Tang 2006; Wong et al. 2009).

Definitions of Child Maltreatment

While increasing efforts have been made by researchers to provide a clearer picture of child maltreatment, concerns have arisen regarding the inconsistencies of violence prevalence rates obtained in empirical studies. Such inconsistencies may be due, in part, to the lack of a universally accepted definition of child maltreatment (Cicchetti and Manly 2001). According to the Federal Child Abuse Prevention and Treatment Act (CAPTA; U.S. Department of Health and Human Services 2003, p. 44), the key U.S. federal legislation addressing child maltreatment, child abuse and neglect refers to “any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse, or exploitation, or an act of failure to act which presents an imminent risk of serious harm.”

In clinical areas, the International Classification of Diseases (ICD; World Health Organization 2004) has often been used as the standard to define child abuse symptoms. However, the definition and conceptualization are less consistent in research fields. In general, child maltreatment includes neglect, physical,

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psychological or emotional abuse, and sexual abuse (Straus et al. 1998). Other researchers have listed additional categories such as moral, legal, and educational maltreatment (Barnett et al. 1993), as well as internet violence. Among these types of maltreatment, the definition of psychological abuse is the most controversial (Kerig and Fedorowicz 1999; McGee and Wolfe 1991), with the placing of exposure to parental violence in the category of psychological aggression still under debate (Hart et al. 1998). Another issue is whether maltreatment should be defined by the behavior of the perpetrator, the experience of the child, or some combination of the two (Barnett et al. 1993). Overall, researchers have arrived at a consensus that a clearer and more universal definition is needed for more accurate investigation of child maltreatment (Kerig and Fedorowicz 1999; Runyan et al. 2005; Shor 1998).

Sources of Reports: Parents Versus Children

The reliance on only one informant (i.e., either the parent or child) might also affect the reliability of findings from past studies (Fantuzzo and Lindquist 1989). Kerig and Fedorowicz (1999) have noted that most research studies using parents as informants obtained data from one parent only and tended to focus on the mothers' reports. Parent reports of child maltreatment may involve response bias and thus provide significant underestimates (Kaufman et al. 1993; Kolko et al. 1996). Factors affecting the reliability of parent reports may include shame, denial, and fear of future legal consequences (Appel and Holden 1998; Cicchetti and Olsen 1990); memory deficits due to the passage of time (McGee et al. 1995); and limited ability to recall information due to posttraumatic stress disorder (PTSD) symptoms when the parent informant also experiences domestic violence (Briere 1992).

The use of child reports is believed to be more accurate and informative in estimating the prevalence of child maltreatment (McGee et al. 1997; Richters and Martinez 1993; Winegar and Lipschitz 1999). However, such reports are not free from limitations. Maltreated children tend to underreport or minimize the amount of abuse they have experienced (Jouriles et al. 1997; McGee et al. 1995), as they often feel a sense of loyalty to the abusive family or parent (Jaffe et al. 1992), or suffer from PTSD symptoms that hinder their accurate recall of information (Graham-Bermann et al. 2006). The use of self-report measures for children may also be problematic as they are often developed by adults whose concepts and constructs of child maltreatment may not be the same as children's. Even for the widely used measure, the Parent–child Conflict Tactics Scale (CTSPC; Straus et al. 1998), the authors have admitted that the measure has its own limitations such as covering only the current caregiver and only limited violent acts, which could lead to lower estimates of the child maltreatment rates (Straus 2007).

To avoid any mono-informant bias resulting from the reliance on a single informant, researchers have stressed the importance of employing multiple sources of information to provide details about abusive events (Kaufman et al. 1994). Past studies have compared parent and child self-reports of child maltreatment and found low to moderate correlation or agreement between the reports. In particular, Jouriles and Norwood (1995) found a moderate correlation between mother and child reports of physical assault, while Kolko et al. (1996) found only a low to moderate correspondence.

Correlates of Child Maltreatment and Its Reporting

The discrepancy in self-reports of parents and children may stem from the difference in reporting styles, which are greatly influenced by the informant's characteristics. As well as the fear of future court actions (Appel and Holden 1998; Cicchetti and Olsen 1990), an informant's level of social desirability may be another major factor affecting disclosure of domestic violence (Arias and Beach 1987; Rosenbaum and Langhinrichsen-Rohling 2006). Informants with a high level of social desirability wish to be viewed positively and are therefore more likely to underreport violent incidents. In fact, Arias and Beach (1987) have discovered a negative association between social desirability and the willingness to report physical violence perpetration.

Apart from social desirability, Straus et al. (1999) have also suggested other possible factors that are related to family violence. Negative attribution, which refers to the negative intentions or blame attributed to the victims of violence, and violence approval, the extent to which violence is acceptable in a variety of interpersonal situations, are examples of these factors. Parents with a high level of negative attribution tend to believe their use of violence is due to the children's fault, while those who approve violence may not regard their acts as problematic. These parents may therefore be less likely to report their violent acts which are socially undesirable and even criminal.

Cultural values may also exert an influence on the perception, tolerance, and reporting of child maltreatment. Asian societies, including Chinese populations, are believed to have cultures and traditions that can be very different to those of Western populations. These specific cultural backgrounds, such as patriarchal authority and the principle of filial piety and unquestioning obedience for children in China, may lead to different patterns of prevalence or reporting of child maltreatment (Chan 2009b). Indeed, past findings have often revealed a higher tolerance for parental physical aggression as disciplinary practices among Chinese populations (Hong and Hong 1991; Wong et al. 2009). In addition, the Chinese concept of face (*mien-tzu*) may play an important role in the reporting of violence (Chan 2009a). According to Carr (1993,

p. 90), *mien-tzu* can be translated as “prestige; dignity; honor; respect; status” that can be gained or lost through interaction with others. Since perpetrating child maltreatment is socially undesirable and may lead one to “lose face” and bring shame on the family (Ho 1990), the abusive parent may refrain from disclosing violent acts. Therefore, a greater need to save face may increase the tendency for parents to underreport, as well as explain the discrepancy between parent and child reports.

As shown by past findings, demographic factors are often associated with child maltreatment. Education level, one indicator of socioeconomic status, was found to be negatively associated with the reported rates of child neglect (Scher et al. 2004); that is, individuals with lower education levels were more likely than their more educated counterparts to report being victimized by child neglect. Furthermore, child age and parental age have also been found to be related to child maltreatment and its reporting. It has been shown that younger aged children, such as infants, were more likely than older children to be victimized by child maltreatment (Chance and Scannapieco 2002). Similarly, young parental age, especially maternal age, is often associated with a higher likelihood to neglect children (Brown et al. 1998; Chaffin et al. 1996).

The Present Study

Taking into consideration the concerns about the reliability of reports from a single source of information, the present study investigated and compared the prevalence of child maltreatment as reported by parents and children. Using a large and representative parent–child matched sample of Chinese families, the study examined the levels of agreement between the matched parent and child reports of different types of child maltreatment, and investigated whether the demographic characteristics (such as age and education level) and psychological characteristics (such as social desirability and face) of parents would be predictive of discrepancies between reports. In order to facilitate comparison, the widely used Conflict Tactics Scale Parent–child Version (Straus et al. 1998), a structured measure developed for the assessment of child maltreatment, was employed. The use of such a structured measure is believed to be effective in reducing inaccurate responses as well as in providing an opportunity for investigators to explain the questions more thoroughly (Bifulco et al. 1994).

Method

Sample

The present study employed data from a representative household survey conducted in Hong Kong in 2004 (hereafter “the 2004 study”). In the 2004 study, eligible households were

sampled using a stratified sampling procedure. Living quarters were sampled from the Register of Quarters that is maintained by the Census and Statistics Department of the Government of Hong Kong with two stratification factors: (a) housing type (publicly subsidized or private) and (b) geographic region. This was an effort to ensure that respondents were drawn from different socioeconomic levels. Of the 4,356 living quarters sampled, 70% agreed to participate. Nonparticipation encompassed both refusals to participate (20%) and failure to contact potential participants (10%).

All Chinese children aged 12 to 17 years, whose parents were married, cohabiting, single, or divorced, were recruited to participate. Children under 12 were not interviewed out of concern that they might not understand some of the questions. Children and their parents gave informed consent prior to the interviews, and all were informed that they could refuse to answer any question at their wish. Interviews were conducted separately on children and their parents from the same family to ensure data confidentiality. Items on sensitive issues were grouped into a separate, self-administered questionnaire which was to be completed and sealed in an envelope by the participants themselves. All interviewers were trained on the ethical issues related to working with participants who reported abuse. Participants were given an information card containing details of social services related to violence prevention and intervention. The study was approved by the ethics committee of the University of Hong Kong.

A parent–child matched subsample of data, with a total of 1,093 children with both parents, was analyzed in the present study. The children sample was 50% male, with a mean age of 14.49 ($SD=1.75$). A complete profile of the matched sample is shown in Table 1.

Measures

Child Abuse and Neglect The Parent–child Conflict Tactics Scale (CTSPC; Straus et al. 1998) was used to assess the prevalence of lifetime child maltreatment and child maltreatment in the year preceding the study. The 32-item CTSPC included acts and behaviors covering four aspects of child maltreatment: (a) physical assault, (b) psychological aggression, (c) neglect, and (d) nonviolent disciplinary behaviors (nonviolent discipline). In the present study, all CTSPC items were rated on a yes/no scale. There were two versions of the scale, one of which was to be completed by children and the other by parents. The CTSPC was translated into Chinese in the present study using a back-translation procedure (Maxwell 1996) in which the items were translated into Chinese by a bilingual translator, then back-translated into English by another, and finally, original and back-translated versions of English items were compared by a third researcher. This procedure was repeated until agreement between the two English versions reached a satisfactory level. With values of

Table 1 Demographic characteristics of respondents

Characteristics	Percentage (%)			$\chi^2/ T\text{-test}$
	Total (n=1,093)	Boys (n=546)	Girls (n=547)	
Child-related				
Age (mean, SD)	14.49, 1.75	14.59, 1.75	14.38, 1.74	1.93
Education level ^a				4.22
Primary	11.3	9.5	13.2	
Lower secondary	55.4	55.5	55.4	
Upper secondary	33.2	35.0	31.4	
No. of siblings				5.77
0	47.3	50.9	43.7	
1	43.6	40.8	46.4	
2 or more	9.1	8.2	9.9	
New arrival from Mainland China	6.6	6.0	7.1	0.52
Disability (physical or mental)	0.4	0.2	0.5	1.00
Father-related				
Age				4.06
20–39	9.4	8.9	9.9	
40–54	79.8	82.2	77.4	
55 or above	10.8	8.9	12.7	
Education level ^a				3.28
Lower secondary or below	62.3	62.8	61.9	
Upper secondary	30.8	29.0	32.5	
Tertiary or above	6.9	8.2	5.6	
New arrival from Mainland China	0.9	0.4	1.3	1.97
Unemployment	7.8	6.9	8.6	0.93
Income ^b [monthly]				0.09
No income	10.7	10.5	10.9	
\$4,999 or below	7.9	7.7	8.0	
\$5,000 or above	81.5	81.8	81.1	
Mother-related				
Age				1.08
20–39	23.7	23.3	24.1	
40–54	73.0	72.8	73.2	
55 or above	3.3	3.9	2.7	
Education level ^a				0.06
Lower secondary or below	67.0	66.9	67.1	
Upper secondary	28.0	28.3	27.8	
Tertiary or above	5.0	4.8	5.1	
New arrival from Mainland China	7.0	5.9	8.0	1.79
Unemployment	3.2	2.7	3.7	0.83
Income ^b [monthly]				0.57
No income	47.5	47.9	47.2	
\$4,999 or below	15.2	15.8	14.5	
\$5,000 or above	37.3	36.6	38.3	
Family-related				
Marital status of parents				3.87
Married/ cohabiting	93.1	91.8	94.5	
Separated/ divorced	5.4	6.2	4.6	
Widowed	1.5	2.0	0.9	

Table 1 (continued)

Characteristics	Percentage (%)			$\chi^2/ T\text{-test}$
	Total (n=1,093)	Boys (n=546)	Girls (n=547)	
Chronic illness or disability of parent(s)	16.2	16.3	16.0	0.02
Indebtedness of parent(s)	8.7	9.6	7.7	0.98
Receiving social security	7.2	5.7	8.7	2.83

^a Primary=grades 1-6 in the U.S.; Lower secondary=grades 7–9; Upper secondary=grades 10–12

^b In Hong Kong dollars (HKD), where 1HKD~0.13USD

.58 (nonviolent discipline), .61 (neglect), .74 (psychological aggression), and .87 (overall physical assault), the reliability coefficients of the translated subscales were satisfactory to good in the present study.

Personal and Relationship Profile (PRP) The PRP is a self-reporting measure consisting of 21 factors theoretically related to domestic violence (Straus et al. 1999). Three subscales—negative attribution, violence approval, and social desirability—were selected in the present study. Respondents rated their agreement with each item on a 4-point Likert scale (1=*strongly disagree*; 4=*strongly agree*), and item ratings in each subscale were summed into a subscale score. The score ranged from 4–16 for negative attribution, from 9–36 for violence approval, and from 13–52 for social desirability; the higher the score, the higher level of the influence of the constructs on participants. All items used in the present study had been translated and back-translated by professionals to obtain a Chinese version. The reliability coefficients of the Chinese version of negative attribution, violence approval, and social desirability were .92, .83, and .55 respectively.

Face The Acquisitive Face Orientation Scale (AFOS) was used to measure the concept of face in the Chinese population. The AFOS is a validated 10-item scale rated on a 4-point Likert scale (1=*strongly disagree*; 4=*strongly agree*). The 10 statements cover the following areas: (a) demonstrating one’s strengths to others; (b) happiness receiving attention or admiration; (c) liking fancy houses, offices, or cars; (d) advertising one’s success; (e) being a person who is admired by others; (f) being a celebrity; (g) being supported and respected; (h) honoring family and ancestors; (i) admiring prestigious, powerful, or high status people; and (j) seizing opportunities to be a leader. The total score ranged from 10 to 40, with a higher score indicating a greater effect of face on the behaviors and cognitions of participants. The internal consistencies were satisfactory to good, with Cronbach’s alpha ranging from .70 in a previous study (Wang 2002) to .93 in the present study.

Questionnaires

Child's Version The child participants were asked to respond to the child's version of the CTSPC and questions concerning demographic information (age, education level, number of siblings, whether they were new arrivals from Mainland China, and whether they had any physical or mental disability).

Parent's Version Both parents of the child were interviewed separately using the parent's version of the questionnaire, consisting of the parent's form of the CTSPC, the selected subscales of the PRP, as well as items about age, education level, marital status, employment status, income, and whether they were in any debt during the time of interview (indebtedness). The families were also asked whether any parent was receiving social security, was in debt, and had a chronic illness or disability.

Statistical Analyses

Prevalence of Child Maltreatment The prevalence rates of child-reported and parent-reported child maltreatment were summarized by type under two time frames: over the child's lifetime and during the year preceding the interview.

Parent–Child Agreement in the Reporting of Child Maltreatment The parent–child matched sample allowed the present study to compare the self-reported child maltreatment prevalence between children and their parents and to investigate the agreement in these self-reports. To test the degree of agreement, Cohen's kappa coefficient analysis was employed. Cohen's kappa is a robust measure that evaluates interrater agreement and has a value ranging from 0 to 1. A greater value indicates a higher level of agreement between raters (or respondents). In general, a kappa value below .20 represents a low level of agreement, a value around .50 implies a moderate agreement, and a value above .80 indicates an excellent agreement (Landis and Koch 1977). Taking into account the possible gender differences in violence reporting, the present study compared the reports between (a) father and son (father-boy), (b) father and daughter (father-girl), (c) mother and son (mother-boy), and (d) mother and daughter (mother-girl).

Factors Affecting the Disagreement Between Reports Logistic regression analyses were conducted to study the effect of the child's age and education level, the parent's age and education level, race, negative attribution, violence approval, and social desirability on the disagreement between child and parent reports. Odds ratios resulting from the analyses were used as a reference for the investigation of the potential effect of these factors. Two separate series of logistic regression were conducted, with one focusing on the effect of the father's

characteristics on the father-child disagreement and the other focusing on the effect of the mother's characteristics on the mother-child disagreement.

In the present study, a p -value below 0.05 was considered statistically significant, and all statistical analyses were performed in SPSS version 17.

Results

Child-Reported Prevalence of Child Maltreatment

The child-reported prevalence of maltreatment by fathers and mothers is shown in Table 2. Overall, the rates of lifetime experience of physical assault, psychological aggression, and neglect by fathers were 37.1%, 63.3%, and 29.1%, respectively. The rates of maltreatment by fathers in the preceding year were 16.7% for physical assault, 45.2% for psychological aggression, and 21.2% for neglect. The prevalence of the three types of child maltreatment by mothers followed a similar pattern. The rates of physical assault, psychological aggression, and neglect as reported by children were respectively 35.7%, 61.0%, and 27.2% over lifetime, and 17.4%, 46.7%, and 21.2% in the preceding year.

When comparing the rates of child maltreatment as reported by boys and girls, no significant gender difference was found, except for the rates of severe and very severe physical assault by mothers in the preceding year. Specifically, girls were more likely than boys to report experiencing severe (11.7% versus 7.9%; $\chi^2=4.48$, $p<.05$) and very severe (3.7% versus 1.5%; $\chi^2=5.23$, $p<.05$) levels of physical assault. When the rate of experiencing either severe physical assault, very severe physical assault, or a combination of the two was considered, girls again were more likely to report maltreatment by mothers than were boys (12.1% versus 8.4%; $\chi^2=3.90$, $p<.05$).

Agreement Between Father and Child Reports

Table 3 shows the comparison of father and child reports on maltreatment by fathers. In general, significant differences were found between father and child reports of most types of maltreatment. Regardless of the time frame used to assess violence (i.e., lifetime or preceding year), children were more likely to report severe and very severe physical assault, as well as neglect by fathers, whereas fathers tended to report higher rates of nonviolent disciplinary behaviors. In addition, fathers were also more likely to admit minor physical assault and psychological aggression against children in the preceding year.

When the father and child reports were matched, the percentages of father-child disagreement on different types of maltreatment ranged from 3% to 35.4%. The kappa coefficients

Table 2 Prevalence of parent's perpetration of violence against children, as reported by boys and girls

Maltreatment	Prevalence of father's violence (%)				Prevalence of mother's violence (%)			
	Total (n=1,093)	Boys (n=546)	Girls (n=547)	χ^2	Total (n=1,093)	Boys (n=546)	Girls (n=547)	χ^2
Lifetime								
Physical assault								
Overall	37.1	39.3	34.9	2.25	35.7	35.6	35.8	0.01
Minor	32.8	35.2	30.5	2.75	32.1	31.9	32.2	0.01
Severe	21.2	21.3	21.1	0.01	20.2	19.6	20.8	0.25
Very severe	6.4	7.4	5.3	1.98	5.6	5.1	6.0	0.42
Severe/Very severe ^a	21.6	21.7	21.5	0.01	20.6	20.0	21.2	0.24
Psychological aggression	63.3	63.1	63.5	0.01	61.0	59.1	62.9	1.66
Nonviolent discipline	74.0	74.8	73.2	0.36	76.2	74.9	77.5	1.06
Neglect	29.1	27.6	30.6	1.22	27.2	27.0	27.4	0.03
Preceding year								
Physical assault								
Overall	16.7	17.2	16.1	0.23	17.4	16.1	18.6	1.19
Minor	13.3	13.1	13.4	0.01	14.5	13.4	15.5	1.02
Severe	9.5	8.3	10.6	1.68	9.8	7.9	11.7	4.48*
Very severe	2.9	2.4	3.3	0.78	2.6	1.5	3.7	5.23*
Severe/Very severe ^a	10.1	9.1	11.2	1.34	10.3	8.4	12.1	3.90*
Psychological aggression	45.2	45.4	45.0	0.02	46.7	45.9	47.5	0.30
Nonviolent discipline	58.6	58.5	58.7	0.00	63.3	61.5	65.1	1.54
Neglect	21.2	20.6	21.8	0.27	21.2	20.2	22.3	0.73

^a "Severe/ Very severe"=Experiencing either a severe level, a very severe level, or a combination of them

* $p < .05$

generally stood at around .24 to .40, indicating a low to moderate agreement between the self-reports of fathers and children. The agreement coefficients of reports were low, and even near to zero for severe physical assault, with only .13 for lifetime and .01 for preceding-year experiences.

Agreement Between Mother and Child Reports

The comparison of mother and child reports of maltreatment by mothers is shown in Table 4. Similar to the discrepancies found between father and child reports, the rates of child-reported maltreatment were significantly different from those reported by mothers. Children reported higher occurrences of lifetime severe and very severe physical assault and neglect, as well as higher rates of severe and very severe physical assault in the preceding year. On the other hand, mothers were more likely to report both lifetime and preceding-year perpetration of minor physical assault, psychological aggression, and nonviolent disciplinary behaviors. The prevalence of overall physical assault in the preceding year was also greater in mother reports.

The analyses of agreement between matched mother and child reports revealed results similar to those obtained in the analyses of father-child matched data. The percentages of

disagreement between reports ranged from 2.9% to 33.7%. The kappa coefficients generally fell within the range of .24 to .38, with the exceptional cases of very severe physical assault over lifetime (kappa=.06) and in the preceding year (kappa=.01). Overall, the agreement between mother and child reports of child maltreatment was low to moderate.

Factors Affecting the Disagreement Between Reports

The present study investigated the effect of certain factors on the disagreement between parent and child reports of minor physical assault (with higher rates in parent reports), and of severe or very severe physical assault (with higher rates in child reports). The factors may be child-related (e.g., child's age and education level) or parent-related (including parent's age, negative attribution, violence approval, social desirability, and face).

Father-Child Disagreement No significant relationship was found between the factors and the disagreement in lifetime prevalence of minor physical assault. Negative attribution and social desirability were found to be associated with the disagreement in father and child reports of minor physical assault in the preceding year. Negative attribution was

Table 3 Comparison of father’s and child’s reports on father’s maltreatment of child

Maltreatment	Father’s report		Child’s report		χ^2	Cohen’s kappa	Agreement ^a		Disagreement ^b	
	n	%	n	%			n	%	n	%
Lifetime										
Physical assault										
Overall	283	33.0	402	37.1	3.40	.40	681	79.5	176	20.5
Minor	279	32.6	356	32.8	0.01	.39	697	81.3	160	18.7
Severe	78	9.1	230	21.2	52.65***	.26	779	90.8	79	9.2
Very severe	17	2.0	69	6.4	21.71***	.13	832	97.0	26	3.0
Severe/ Very severe ^c	78	9.1	234	21.6	55.33***	.26	775	90.3	83	9.7
Psychological aggression	563	65.7	687	63.3	1.18	.33	554	64.6	303	35.4
Nonviolent discipline	697	81.3	803	74.0	14.60***	.29	579	67.6	278	32.7
Neglect	154	17.9	316	29.1	32.63***	.28	672	78.3	186	21.7
Preceding year										
Physical assault										
Overall	163	19.0	181	16.7	1.80	.29	622	72.6	235	27.4
Minor	161	18.8	144	13.3	11.00***	.31	626	73.1	231	27.0
Severe	31	3.6	103	9.5	25.80***	.25	694	80.9	164	19.1
Very severe	5	0.6	31	2.9	13.63***	.01	804	93.7	54	6.3
Severe/ Very severe ^c	32	3.7	110	10.1	29.05***	.24	692	80.7	166	19.4
Psychological aggression	462	53.9	490	45.2	14.66***	.30	597	69.7	260	30.3
Nonviolent discipline	613	71.5	636	58.6	34.78***	.29	652	76.1	205	23.9
Neglect	125	15.7	230	21.2	9.38**	.28	635	74.0	223	26.0

^a “Agreement”=% (Father-yes; Child-yes)+% (Father-no; Child-no). ^b “Disagreement”=% (Father-yes; Child-no)+% (Father-no; Child-yes). ^c “Severe/ Very severe”=Experiencing either a severe level, a very severe level, or a combination of them

p*<.05. *p*<.01. ****p*<.001

positively related to the odds of such disagreement (adjusted *OR*=2.08, 95% *CI*=1.32, 3.26, *p*<.01), whereas social desirability was negatively associated (adjusted *OR*=0.43, 95% *CI*=0.27, 0.69, *p*<.001).

As for severe to very severe physical violence, no factor was significantly associated with the disagreement in the self-reported lifetime experience of violence, while social desirability was the only factor associated with the disagreement in severe to very severe physical assault (adjusted *OR*=0.39, 95% *CI*=0.21, 0.71, *p*<.01). Specifically, a higher level of the father’s social desirability leads to a decrease in the odds of disagreement between reports.

Mother–Child Disagreement For lifetime minor physical assault by mothers, the child’s education level (adjusted *OR*=0.39, 95% *CI*=0.19, 0.81, *p*<.05) and mother’s age (adjusted *OR*=0.41, 95% *CI*=0.18, 0.96, *p*<.05) were significantly associated with the mother-child disagreement. The child’s age and the mother’s level of violence approval were associated with the disagreement between reports of minor physical assault in the preceding year. An increase in the child’s age decreased the odds of disagreement (adjusted *OR*=0.82, 95% *CI*=0.71, 0.94, *p*<.01), while an increase in the mother’s

violence approval increased the odds of disagreement (adjusted *OR*=1.73, 95% *CI*=1.06, 2.83, *p*<.05).

When focusing on the mother’s lifetime perpetration of severe or very severe maltreatment, violence approval and face were significantly associated with the disagreement between mother and child reports. An increase in the odds of such disagreement was associated with an increase in the mother’s violence approval (adjusted *OR*=1.82, 95% *CI*=1.11, 2.97, *p*<.05) and a decrease in the extent to which mothers valued saving face (adjusted *OR*=0.69, 95% *CI*=0.50, 0.95, *p*<.05). For the disagreement in severe or very severe physical assault in the preceding year, the mother’s negative attribution was the only significant associated factor (adjusted *OR*=0.70, 95% *CI*=0.49, 0.99, *p*<.05). That is, the greater the mother’s negative attribution, the lower were the odds of disagreement between mother and child reports.

Discussion

Using a large and representative parent–child matched sample, the present study investigated the prevalence of different types

Table 4 Comparison of mother's and child's reports on mother's maltreatment of child

Maltreatment	Mother's report		Child's report		χ^2	Cohen's kappa	Agreement ^a		Disagreement ^b	
	<i>n</i>	%	<i>n</i>	%			<i>n</i>	%	<i>n</i>	%
Lifetime										
Physical assault										
Overall	374	39.9	390	35.7	3.72	.37	738	78.8	199	21.2
Minor	372	39.4	350	32.1	12.10***	.38	749	79.5	193	20.5
Severe	89	9.4	221	20.2	45.84***	.24	858	91.0	85	9.0
Very severe	16	1.7	61	5.6	20.86***	.06	911	97.1	27	2.9
Severe/ Very severe ^c	90	9.6	225	20.6	46.79***	.24	852	90.8	86	9.2
Psychological aggression	657	69.8	666	61.0	17.34***	.32	623	66.3	317	33.7
Nonviolent discipline	783	83.1	832	76.2	14.85***	.25	649	69.0	292	31.0
Neglect	210	22.4	297	27.2	6.30*	.30	733	78.1	199	21.2
Preceding year										
Physical assault										
Overall	215	22.9	190	17.4	9.63**	.34	660	70.4	277	29.6
Minor	214	22.7	158	14.5	22.91***	.33	670	71.1	272	28.9
Severe	36	3.8	107	9.8	27.77***	.26	760	80.6	183	19.4
Very severe	5	0.5	28	2.6	13.04***	.01	876	93.4	62	6.6
Severe/ Very severe ^c	38	4.0	112	10.3	28.46***	.28	756	80.6	182	19.4
Psychological aggression	558	59.3	510	46.7	32.16***	.34	645	68.6	295	31.4
Nonviolent discipline	698	74.1	691	63.3	27.34***	.29	707	75.1	234	24.9
Neglect	178	19.0	232	21.2	1.64	.31	698	74.4	240	25.6

^a "Agreement"=% (Mother-yes; Child-yes)+% (Mother-no; Child-no). ^b "Disagreement"=% (Mother-yes; Child-no)+% (Mother-no; Child-yes).

^c "Severe/ Very severe"=Experiencing either a severe level, a very severe level, or a combination of them

* $p < .05$. ** $p < .01$. *** $p < .001$

of father-to-child and mother-to-child maltreatment. Findings showed that over 60% of the child respondents had experienced at least one type of child maltreatment, reflecting that child maltreatment was not a rare phenomenon in Hong Kong. In line with past research findings (Chen and Dunne 2006; Pinheiro 2006; Shen 2006; Tang 2006; WHO 2002; Wong et al. 2009), the present study found that psychological aggression was the most common reported form of parent-to-child maltreatment, followed by minor physical violence, neglect, severe physical violence, and very severe physical abuse.

Overall, boys and girls were equally likely to report an experience of parental child maltreatment. Significant gender differences were found only for mother-to-child severe and very severe physical violence, for which girls reported higher occurrences of abuse. Contradicting previous findings that boys, subjected to stricter physical discipline due to higher parental expectations, were more prone to maltreatment (Tang 2006; Wong et al. 2009), the present results seem to support the argument that boys are less likely to be mistreated (Finkelhor 1994). The lower reported rates of child maltreatment among boys could be explained by their higher value as perceived by Chinese parents (Festini and de Martino 2004; Korbin 1991). On the other hand, the higher rates of parental abuse against

girls might be due to their greater likelihood for being socialized to be more compliant and responsive to others' needs (Wellman 1993), as well as their higher tendency to disclose victimization experiences to others as they were more likely to receive positive reactions (Ullman and Filipas 2005)

Parent–Child Disagreement in the Occurrence of Child Maltreatment

The present study found significant disagreement between the experiences of parent-to-child maltreatment as reported by parents and children. The parent–child agreement, as measured by Cohen's kappa coefficients, was relatively low across different forms of child maltreatment. In particular, parents, regardless of their gender, were less likely to report severe and very severe physical violence against their children. On the other hand, they were more likely to report using minor physical assault, psychological aggression, nonviolent discipline, and neglect. The present finding may provide a piece of supporting evidence that parents tend to underreport severe forms of child abuse and regard their violent behaviors as less severe than children's reports. One possible explanation for this may be the fear of future consequences or court actions

after admitting an offense of domestic violence (Appel and Holden 1998; Cicchetti and Olsen 1990; Edleson and Brygger 1986; Straus and Kaufman-Kantor 1994). Also, the discrepancy between parent and child understandings of discipline practices might influence the reporting of child maltreatment.

Factors Affecting the Parent–Child Disagreement in Child Maltreatment

To explore other possible explanations for the disagreement between children's and parents' reports, the present study investigated the associations of various child, parent, and family factors with the disagreement between reports. Several factors were found to be predictive of disagreement between self-reports of parents and children. Fathers' social desirability was the only significant predictor common to the disagreement between father and children reports in minor and severe plus very severe physical assault. In particular, a higher level of fathers' social desirability led to a lower disagreement between father-child matched reports. It is expected that a higher level of parents' social desirability would predict a greater tendency to underreport violence (Arias and Beach 1987; Rosenbaum and Langhinrichsen-Rohling 2006). From these findings, the lower level of disagreement between reports may imply that a child's underreporting of maltreatment is also affected by a higher level of fathers' social desirability, which may be attributed to a child's feelings of loyalty toward the abusive family or parent (Jaffe et al. 1992). If both father and child underreport child maltreatment, it will likely result in a lower level of disagreement between reports. However, how parents' social desirability affects the reporting of both parents and children may be worth investigating in future research.

In contrast, factors affecting mother-child disagreement on minor physical assault were more diverse, including the child's age, the mother's age being under 34, and violence approval. As for mother-child disagreement on severe plus very severe physical abuse, factors included negative attribution, violence approval, and face. As the only common predictive factor for the discrepancy in self-reported minor and severe plus very severe physical assault, an increase in the mother's level of approval of the use of violence to discipline children was related to an increase in such discrepancies. That is, a mother who accepts violent acts as disciplinary practices may be more likely to regard severe physical abuse as minor corporal punishment. This may provide supporting evidence for the effect of violence approval on one's experience and reporting of violent behaviors (Jaffe et al. 1992).

Limitations and Suggestions for Future Studies

Some limitations must be noted in interpreting the present findings. Not only did the retrospective cross-sectional design restrict the study's ability to confirm causal relationship

between reporting styles and associated factors, but it also might have affected the accuracy of respondent reports. Indeed, due to under- or overreporting, the actual prevalence of child maltreatment is almost impossible to determine. The present findings may support the argument that underreporting of severe physical assault perpetrated by parents is common. However, it is possible that the child reports may also be inaccurate due to recall bias. A longitudinal prospective design, which allows tracking of the occurrence of child maltreatment within the time frame, may be able to provide evidence to explain the causal relationship. However, several ethical issues must be addressed before one can adopt a longitudinal approach to the study of violence. One is whether or not to provide interventions in reported child abuse cases. Providing an intervention may confound the study results, but ignoring cases of abused children may be unethical. Future research might develop a better design by increasing the reliability of child maltreatment reporting while at the same time minimizing potential ethical problems.

Due to the limited resources available throughout the study period, child sexual abuse was not investigated, and children under the age of 12 were not interviewed in the present study. To offer a more complete profile of child maltreatment by parents, future studies might consider covering sexual abuse and examining the agreement between parent and child reports on such violence, as well as modifying the questionnaires and interview procedures so that younger children can participate.

Practical Implications

In conclusion, the present study provided evidence that child maltreatment is not uncommon among Chinese families in Hong Kong. The relatively high occurrence of different forms of child maltreatment reflects a need for greater public and research attention. Intervention is of great importance to existing child maltreatment cases, and accurate screening is the key to the provision of effective intervention. As shown by the present findings, the reliability of both parent and child reports is not as good as one may think. The significant discrepancies between parent and child reports may highlight the importance of simultaneously using reports from both parents and children in future screening and intervention programs for child maltreatment.

Acknowledgement This study was commissioned by Social Welfare Department, the Government of Hong Kong and funded by the Lotteries Fund.

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