# **ORIGINAL ARTICLE**

# Early Exposure to Violence in the Family of Origin and Positive Attitudes towards Marital Violence: Chinese Immigrant Male Batterers vs. Controls

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**Abstract** This study examined self-reported early exposure to violence in the family of origin and positive attitudes towards marital violence as risk factors in court-referred Chinese immigrant male batterers (N=64) versus controls (N=62). Early exposure to violence was positively correlated with marital violence, but it alone did not differentiate the batterers from the controls, as both groups were widely exposed to it. While it was significantly correlated with marital violence in the batterer group, it was significantly correlated with depression in the control group. Positive attitudes towards marital violence were not only correlated with marital violence but also sufficient to differentiate the batterers from the controls. It also partially mediated the effect of early exposure to violence on marital violence. These two risk factors together accounted for 21.9% of the variance in marital violence over and above sociodemographic variables and marital dissatisfaction. Research and treatment implications based on these findings were outlined.

**Keywords** Male batterer · Early experience · Attitudes · Chinese immigrants

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M. Yoshioka School of Social Work, Columbia University, New York, NY, USA The US Department of Health and Human Services' Office of Refugee Resettlement identified domestic violence as one of the most serious problems facing the Asian immigrant community. Although no systematic data collection is available to quantify severity of intimate partner violence (IPV) in the Asian community, there is evidence suggesting that Asians are over-represented in IPV fatalities. While Asians comprised 3% of the population of Massachusetts, 18% of the state's residents killed due to IPV in 1997 were Asian, as reported by the Asian Task Force Against Domestic Violence http://www.atask.org/about atask. html). Although that number dropped to 6% in the following year, which was a 4-year low according to Asian & Pacific Islander Institute on Domestic Violence http:// www.apiahf.org/dvinstitute/CriticalIssues/Homicides.html), it was still disproportionately high.

In a review of deaths related to IPV from 1994 to 1997 in Santa Clara, California, the County's Death Review Committee found that of the 51 victims, 17 were Asian, 14 White, 12 Hispanic, 5 African American, 2 mixed-races, and 1 other. In contrast to over-representation of Asians in IPV fatalities, the Committee noticed that IPV in the Asian community was seriously underreported. Of the 17 Asian victims, only one was known to community agencies prior to the killing (Santa Clara County Death Review Committee Final Report, October 1997, quoted from Violence Against Women Online Resources, http://www.vaw.umn.edu).

Likewise, Asian male batterers have thus far mostly escaped the attention of the research community. Although research identifying risk factors associated with male batterers may shed light on the roots of IPV and facilitate the development of effective interventions, such research is almost nonexistent with the Asian populations. The current study was an attempt to fill this research gap by investigating, among other risk factors, early exposure to



violence in the family of origin (referred to as early exposure hereunder) and positive attitudes towards IPV in Chinese immigrant male batterers vs. controls, while controlling for marital dissatisfaction, depression, sociodemographic variables, and acculturation. In addition, it examined positive attitudes towards IPV as a mediating factor between early exposure and IPV.

Bandura's (1979) social learning theory has been used to explain the link between early exposure and IPV. This perspective highlights that habitual actions are acquired through observation of others and maintained by social rewards. Thus, children who watch their fathers beat their mothers or who are physically abused by their parents may have learned that a person can overpower the other and get what he wants by violence at home (Widow 1997). They are therefore more likely to develop IPV when they become adults.

Many studies in the general population and other selected ethnic populations found this correlation (Dutton and Hart 1992; Ehrensaft et al. 2003; Kalmuss 1984; Schafer et al. 2004; White and Widom 2003). Fourteen out of 16 studies reviewed by Hotaling and Sugarman (1986) found a significant relationship between witnessing violence as a child or adolescent and husband-to-wife violence. In addition, nine out of 13 studies found a relationship between experiencing violence as a child or adolescent and husband-to-wife violence.

Early exposure was also found to differentiate male batterers from non-violent men in a number of studies. Rosenbaum and O'Leary (1981) compared 20 batterers to 20 non-violent but unhappily married men and 20 non-violent and happily married men. Batterers had more early exposure than men in the other two groups. Dutton and Hart (1992) compared domestically violent criminals to non-violent criminals and other violence criminals (N=70). Of the domestically violent criminals, 41% experienced physical violence as a child vs. 30% of the other violence criminals and 15% of the non-violent criminals.

Despite these findings, there exist controversies about the cycle of domestic violence. Kaufman and Zigler (1993) believe that intergenerational transmission of abuse is overstated, because many of these studies are retrospective reports that tend to overestimate the impact of early experiences on the development of pathologies.

More recent longitudinal and prospective studies were able to establish the link between early exposure and IPV with more clarity. In a 20-year prospective study with a community sample from upstate New York (Ehrensaft et al. 2003), child physical abuse was found to be a strong independent risk for injury to a partner. In a longitudinal follow-up study (White and Widom 2003), individuals who were abused and or neglected prior to age 12 were interviewed when they were about 29 years old. These

individuals reported significantly higher rates of hitting or throwing things at a partner than their matched controls.

The link between early exposure and IPV was also established in a national representative sample and found to be more significant in ethnic minorities (Schafer et al. 2004). However, as in most other studies, the researchers only tested their path models on African American, Hispanic, and White couples. While men's report of childhood physical abuse was linked to men's perpetration of IPV in all three groups, it had a significantly greater effect in the African American and Hispanic models than in the White model.

There is evidence suggesting that corporal punishment is widespread in Asian societies. In Korea, corporal punishment is often employed by both parents and teachers (Doe 2000). In Chinese culture, physical punishment is documented as the most common form of punishment (Ho 1986). Such observations not only generate research interest but also create a research dilemma. On the one hand, it points to the need to examine early exposure as a risk factor in the study of Chinese male batterers. Although corporal punishment may not be equivalent to physical abuse and other forms of early exposure, it nevertheless communicates to the child with the same message specified by the social learning theory—violence is a means to get what one wants (i.e., to make the other person obey). In addition, the boundary between corporal punishment and physical abuse can be easily crossed. On the other hand, it suggests that early exposure alone may not be sufficient to differentiate Chinese male batterers from non-violent Chinese men if both groups were indeed widely exposed to violence in their families of origin.

On the basis of the social learning perspective and the findings in the general and other selected ethnic populations, we would like to test the hypothesis that the Chinese immigrant male batterers were more often the victims of violence in their families of origin than the controls. However, given that corporal punishment was widespread in Asian societies and both the batterers and controls might be widely exposed to family violence, we were more inclined to predict that although early exposure would be correlated with IPV, it alone might not be sufficient to differentiate the Chinese male batterers from the controls.

Men develop IPV for varied reasons. For a review of various psychological, sociodemographic, and relational correlates of marital violence in the literature, see Holtzworth-Munroe et al. 1997a, b, and Schumacher et al. 2001. It is therefore important, as O'Leary and his colleagues stressed (O'Leary and Curley 1986; O'Leary et al. 1994), to analyze simultaneously the attitudinal, emotional, and behavioral factors in determining their relative merits in accounting for IPV. Moreover, impact of early exposure on IPV may be confounded, moderated, or mediated by other factors.



Positive attitudes towards marital violence have been identified as a risk for IPV by sociologists and social psychologists. Attitudes are thought to be learned and to affect behavior (Snyder and DeBono 1989). In a meta-analysis of 88 attitude-behavior studies, Kraus (1995) found that attitudes significantly and substantially predict future behavior, and more so when both the attitude and the behavior are specific. Most studies in the general population and other selected populations found a positive relationship between men's approval of marital violence and IPV (Dibble and Straus 1980; Kaufman Kantor et al. 1994; Stith and Farley 1993).

There appears to be both temporal and causal relationships between early exposure and positive attitudes toward IPV. Exposure to violence in the family of origin that occurs early in one's life is likely to contribute to development of positive attitudes toward IPV. A person who was exposed to violence in his childhood may approve IPV through observational learning, as suggested by the social learning theory (Bandura 1979), or through identification with the abuser, a term that Freud (1946) first used to describe a defense mechanism. Identification with the abuser in this case refers to the internalization of the violent father figure's positive attitudes towards marital violence.

Thus, although early exposure may be a direct pathway and stand on its own as a predictor for IPV, development of positive attitudes towards IPV may mediate this effect and may partially explain why some of the victims of early exposure develop IPV and others do not develop IPV.

We predicted that positive attitudes towards martial violence would only partially mediate the effect of early exposure on IPV. More specifically, we expected that the impact of early exposure on IPV would diminish but remain significant, after controlling for the effect of positive attitudes towards IPV. This is so because the consequences of early exposure obviously go beyond just the development of positive attitudes towards IPV. Early exposure, for example, can teach a person how to carry out the violence through modeling and may also lead to greater tolerance of violence through desensitization. Desensitization has been discussed and studied in the literature as one of the key mechanisms for the effects of exposure to community violence, media violence, and video game violence (Drabman and Thomas 1974; Funk et al. 2004). Thus, we predicted that early exposure and positive attitudes towards IPV together would account for more variance in IPV than either one alone.

On the other hand, Chinese immigrants' attitudes toward IPV may also be influenced by their home culture as well as by their host culture. A recent Asian family violence survey in Boston (Yoshioka 2000) reveals that number of adults who reported being hit regularly as a child is very high in

both the Chinese sample (61%) and the Korean sample (80%). However, while 22.9% of the Chinese adults agreed with the statement that some wives ask for beatings, only 5.8% of the Korean adults shared this attitude, indicating possible cross-cultural differences in attitudes toward marital violence within the Asian community.

Acculturation refers to the extent to which immigrants take on the norms and behavior patterns of the host society (Gordon 1964). Thus, acculturation may have an impact on Chinese immigrant men's attitudes towards marital violence as well as their marital aggression. In their study of the relationship between sociocultural status and marital violence in Hispanic families, Kaufman Kantor et al. (1994) found that the most highly acculturated subgroups (i.e., Mexican Americans and Puerto Ricans) reported the highest rates of wife assaults, although acculturation as measured by language preference had no significant effects on wife assaults after controlling for other cultural and socioeconomic variables.

We proposed to assess the Chinese male batterers' levels of acculturation by measuring their cultural preferences between heritage culture and North American culture in entertainment, friendship, marriage, and value orientation. We would then examine the relationship between their levels of acculturation and their attitudes towards IPV. By examining how acculturation was related to the participants' attitudes toward IPV, we might gain some knowledge as to the relative roles that their home and host cultures played in their marital aggression.

We would control for participants' marital satisfaction, depression, and some sociodemographic variables (i.e., age, marital status, employment status, education level, and income), all of which have been found to be significantly correlated with IPV in the general population and other selected ethnic populations (see Holtzworth-Munroe et al. (1997) and Schumacher et al. (2001) for a good review of the impact of these variables on IPV).

In addition to sociodemographic variables that are routinely included in the study of the general population and other selected ethnic populations, we also included immigration status, years in the US, and change in income and education due to immigration in our study to reflect the immigration experience of the population of interest. Immigration status (the "green card" factor) was included because of its strong association with experience of immigration. Length of being in the US is not only associated with experience of immigration but also related to levels of acculturation. Change in income and education may indicate how well an immigrant is adjusting to the US.

To summarize, we proposed to test the hypothesis that the Chinese immigrant male batterers were more often the victims of early exposure to violence in their families of



origin than the controls. Beyond this rather generic hypothesis (i.e., in line with the current literature), we predicted that although early exposure would be correlated with IPV, it alone might not be sufficient to differentiate the Chinese male batterers from non-violent Chinese men. We predicted that early exposure and positive attitudes towards marital violence to be two risk factors for IPV. We also predicted that positive attitudes towards martial violence would partially mediate the effect of early exposure on IPV. We predicted that the two risk factors together would account for more variance in IPV than either one alone. We would control for marital satisfaction, depression, common sociodemographic variables, and acculturation. We would also control for immigration status, years in the US, and change in income and education due to immigration to reflect the immigration experience of our sample.

#### Materials and Methods

# **Participants**

The Chinese immigrant male batterers in this study (N=64)were referred by courts in the New York Metropolitan area, including Queens, Brooklyn, Manhattan, Nassau County, and parts of New Jersey between January 2001 and April 2003. After being arrested for battering their spouses, they were referred to an Asian outreach program, located in Queens, New York, for mandatory domestic violence treatment. As the only bilingual treatment program known for this population, the referrals that this program received should be representative of all the Chinese immigrant male batterers arrested in the New York Metropolitan area during this period of time. Altogether, there were 94 Chinese referrals. Sixty-eight men (72%) agreed to participate in this study by signing an informed consent and returning the completed questionnaires anonymously before they started treatment. Four of them were removed from the batterer group in comparison analyses, as their victims were family members other than spouses. Twenty-six men (28%) refused to participate in this study.

The control group (N=62) was composed of Chinese immigrant men recruited from the New York Metropolitan area during the same time period. Altogether, 600 Chinese male adults were contacted through Chinese school personnel, hospital or clinic Asian outreach personnel, and Chinese business personnel who had connection to their local Chinese communities. Twelve percent of them (N=70) agreed to participate in this study by signing the informed consent and returning the completed questionnaires anonymously. Eight of them (about 11%) were removed from the control group in comparison analyses, as their scores on the Conflict Tactics Scales (Form N) (Straus 1979) indicated IPV in the past year.

In comparison to the batterers, the controls were significantly older, t (110)=3.91, p<0.01; of higher income, t (109)=8.79, p<0.01; more educated, t (112)=5.58, p<0.01; with higher immigration status, t (84)=3.66, p<.01; and living in the US for more years, t (106)=2.99, p<0.01, 2-tailed. Table 1 reports the two groups' age, income, education, immigration status, and years in the US.

#### Measures

(1) Childhood Trauma Questionnaire (CTQ) (Bernstein et al. 1994)<sup>1</sup> is a retrospective self-report measure of childhood abuse and neglect. Its three abuse scales (i.e., physical, emotional, and sexual abuse) were used in this study to assess the two groups' early exposure. Bernstein and Fink (1998) reported the measure's strong internal consistency and test–retest reliability and provided some evidence for its convergent and discriminant validity.

A four item subscale extracted from a measure constructed by Rosenbaum and O'Leary (1981) was used to assess another type of early exposure—witnessing parents' marital violence. This subscale's internal consistency reliability was alpha=0.58 for males and 0.64 for females (MacEwen and Barling 1988). To be used together with the CTQ, its four original questions were transformed into four statements so that a question about how frequently the respondent witnessed one parent hit the other became a statement that he witnessed one parent hit the other. The respondent was then asked to rate each statement from 1 (never true) to 5 (very often true) as in the three abuse scales of the CTQ. The internal consistency reliability of this modified version was alpha of 0.65 for our Chinese sample.

(2) The Conflict Tactics Scales (CTS) (Form N) (Straus 1979) was used to assess the participants' marital aggression over the past year. This outcome measure was included to ensure that not all the participants in the control group were automatically classified as non-violent, and not all the participants in the batterer group were treated as equally violent. Marital violence in this study was then treated as a continuous variable (by administering the CTS) and as a dichotomous variable (based on whether the participant was mandated by a court for male batterer treatment) in statistical analyses.

Straus (1979) reported high reliability coefficients for both the Verbal Aggression and Violence scales but noted



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Table 1 Means and ranges of age, income, years of education, immigration status, and years in the US for the batterer group and control group

		N					
		Valid	Miss	Mean	Std. div.	Mini.	Maxi.
Age	Batterers	54	10	40.74	8.70	21	63
	Controls	58	4	46.52	6.89	29	65
Income <sup>a</sup>	Batterers	54	10	4.33	2.02	1	10
	Controls	57	5	7.84	2.18	1	10
Years of ed.	Batterers	54	10	12.22	4.30	3	22
	Controls	60	2	16.43	3.75	9	25
Immigration status <sup>b</sup>	Batterers	59	5	3.27	0.94	1	4
	Controls	61	1	3.77	0.46	2	4
Years in US	Batterers	53	11	13.21	7.08	1	31
	Controls	55	7	17.05	6.28	2	30

<sup>&</sup>lt;sup>a</sup> Income was measured on a 10-point scale where 10=\$100,000 or above, 9=\$80,000 to \$100,000, 8=\$50,000 to \$80,000, 7=\$35,000 to \$50,000, 6=\$25,000 to \$35,000, 5=\$20,000 to \$25,000, 4=\$15,000 to \$20,000, 3=\$10,000 to \$15,000, 2=\$5,000 to \$10,000, and 1=less than \$5,000.

the lack of definitive evidence supporting the validity of the CTS although there was some evidence for its concurrent and construct validity. The internal consistency reliability was alpha=0.77 for Verbal Aggression and 0.53 for Physical Violence in this study.

(3) The Inventory of Beliefs about Wife Beating (Saunders et al. 1987) has five subscales that prompt the respondent to rate various belief statements about wife beating on a seven-point scale. The five subscales are Wife Beating Is Justified, Wives Gain From Beatings, Help Should Be Given, Offender Should Be Punished, and Offender Is Responsible. The later three subscales were reverse-scored and renamed as Help Should Not Be Given, Offender Should Not Be Punished, and Offender Is Not Responsible in this study to be consistent with the first two subscales so that the higher the total score was the stronger the positive attitudes towards marital violence (i.e., approval of marital violence).

Acceptable internal reliability and some support for the construct validity of the five subscales was reported (Saunders et al. 1987). The internal consistency reliability of the five subscales in the current study was alpha=0.86 for *Wife Beating Is Justified*, 0.83 for *Wives Gain From Beatings*, 0.70 for *Help Should Not Be Given*, 0.69 for *Offender Should Not Be Punished*, and 0.58 for *Offender Is Not Responsible*.

(4) The *Index of Marital Satisfaction* (IMS) (Hudson 1982) contains 25 statements about how one feels about his partner or marital relationship. Each is rated on a five-point scale, with higher score indicating more marital dissatisfaction. Hudson (1982) reported high internal consistency reliability and good discrim-

- inant and construct validity of the IMS. The internal consistency reliability of the IMS was excellent with alpha of 0.97 in the current study.
- (5) The *Beck Depression Inventory, Short Form* (BDI Short) (A. T. Beck and R. W. Beck 1972)<sup>2</sup> was used to assess participants' depression. The BDI Short Form has 13 items. It correlates 0.96 with the original 21-item BDI (Beck et al. 1961) and 0.61 with clinicians' ratings of depression (A. T. Beck and R. W. Beck 1972). The BDI Short Form's internal consistency reliability was alpha of 0.79 in the current study.
- (6) The Vancouver Index of Acculturation (VIA) (Ryder et al. 2000) follows a bidimensional perspective of acculturation which argues that people can adopt much of the mainstream culture without giving up their heritage culture. It includes ten items measuring one's heritage culture and ten items measuring one's mainstream culture with regard to entertainment, friendship, marriage, and value orientation. Ryder et al. (2000) reported high internal consistency reliability of the VIA and provided evidence for its validity. The internal consistency reliability of the VIA was alpha=0.86 for heritage culture and 0.84 for mainstream culture in the current study.
- (7) A sociodemographic questionnaire developed for this study was used to collect sociodemographic information which included age, education, income, immigration status, and years in the US.

All the measures were translated into Chinese by four bilingual Chinese Americans (three doctorates and one

<sup>&</sup>lt;sup>b</sup> Immigration status was reported on a 5-point scale where 5=America born, 4=US citizen through naturalization, 3=US permanent resident (green card holder), 2=other immigrant status (visitor visa, etc.), and 1=undocumented.

<sup>&</sup>lt;sup>2</sup> Beck Depression Inventory, Short Form is copyrighted by Aaron T. Beck, M.D. All rights reserved.

MSW). Back translation was conducted to insure the accuracy. All of our Chinese participants were foreign born and all but one chose to complete these measures in Chinese. The Conflict Tactics Scales, the Beck Depression Inventory, and the Vancouver Index of Acculturation were used in other studies with Chinese samples and also showed acceptable psychometric properties (Tang 1994; Ryder et al. 2000; Yick 2000).

# Results

Early exposure to violence in the family of origin was widespread and was significantly positively correlated with marital violence Of all the participants in this study (N=138, referred as the Group of all Participants hereunder), about 42% reported some form of childhood physical abuse, 58% reported emotional abuse, 16% sexual abuse, 76% witnessing violence, and 37% reported perpetration of IPV in the past year. Childhood physical, emotional, and sexual abuses were found to be significantly correlated with IPV, r=0.40, 0.38, and 0.35, respectively, p<0.01. Witnessing violence as a child was not significantly correlated with IPV, r=.14. The Group of all Participants included the 64 batterers, the 62 controls, the eight community-recruited men whose scores on CTS indicated perpetration of IPV in the past year, and the four court referrals whose victims were family members other than a spouse.

However, early exposure alone did not differentiate Chinese immigrant male batterers from non-violent Chinese immigrant men The batterers on average reported 2.03 violent incidents against a spouse in the past year vs. none by the controls. As displayed in Table 2, the batterer group had slightly more exposure to violence in their families of

origin than the control group. For example, about 44% of those in the batterer group experienced childhood physical abuse versus about 39% of those in the control group. Also, the batterer group reported exposure to more severe violence than the control group did, as reflected in the batterer group's higher mean scores and higher maximum scores on each of the four types of early exposure. However, as reported in Table 3, no significant differences were found between the batterers and the controls in the four types of early exposure to violence in the family of origin.

In the batterer group, early exposure was found to be significantly correlated with positive attitudes towards marital violence, but it was not in the control group. For example, childhood physical abuse was significantly correlated with the beliefs that Wife Beating is Justified and Wives Gain from Beatings in the batterer group but not in the control group. See Table 4 for the correlations between the four types of early exposure and positive attitudes towards marital violence in both groups.

Early exposure in the control group was correlated with depression, as predicted by our supplemental hypothesis. The association between early exposure and positive attitudes towards marital violence in the batterer group was predicted, and so was the lack of such an association in the control group. However, if early exposure as a risk factor was not significantly correlated with positive attitudes toward marital violence in the control group, with what was it correlated, assuming early exposure to violence in the family of origin would also have adverse consequences for those in the control group?

Abraham (1911/1948) and Freud (1917/1957) thought of depression as a response to loss in which the person's rage at the lost object was turned inward against the self. Along this line of psychodynamic thinking, we hypothesized that

**Table 2** Batterers vs. controls in self-reported childhood physical abuse, emotional abuse, sexual abuse, witnessing parents' marital aggression, and IPV in the past year (current violence)

		N	Mean	Std. div.	Mini.	Maxi.	Present (%)	Absent (%)
Physical abuse	G.1 <sup>a</sup>	61	6.39	2.47	5	20	44.3	55.7
•	$G.2^{b}$	62	6.02	1.92	5	14	38.7	61.3
Emotional abuse	G.1	61	6.75	2.78	5	21	59.0	41.0
	G.2	62	6.26	1.60	5	11	54.8	45.2
Sexual abuse	G.1	61	5.57	1.79	5	17	19.7	80.3
	G.2	62	5.26	0.75	5	9	14.5	85.5
Witnessing violence	G.1	58	5.53	1.74	4	12	75.8	24.2
	G.2	62	5.50	1.13	4	9	80.6	19.4
Current violence	G.1	60	2.03	2.40	0	12	70.0	30.0
	G.2	62	0.00	0.00	0	0	0.0	100.0

<sup>&</sup>lt;sup>a</sup>G.1=Group 1 (The batterer group).

<sup>&</sup>lt;sup>b</sup>G.2=Group 2 (The control group).



**Table 3** Independent samples *t*-test comparing mean differences between batterers and controls in childhood physical abuse, emotional abuse, sexual abuse, and witnessing parental marital violence as a child

	Clinical group		Control gr	Control group		df	Sig. (2-tailed)
	M	SD	M	SD			
Physical abuse	6.39	2.47	6.02	1.92	0.93	121	0.356
Emotional abuse	6.75	2.78	6.26	1.60	1.21	121	0.227
Sexual abuse	5.57	1.79	5.26	0.75	1.28	121	0.203
Witnessing violence	5.53	1.74	5.50	1.13	0.13	118	0.897

unlike the Chinese male batterers whose early exposure to violence led to anger toward the other as reflected in their marital aggression and their approval of marital violence, the non-violent Chinese men's early exposure to violence would likely lead to anger toward the self, i.e., depression. To test this supplementary hypothesis, we included both depression and marital dissatisfaction in the analysis, as one would expect depression to be closely related to marital dissatisfaction.

The results at least partially confirmed the supplementary hypothesis. The best contrast was seen in the difference between the two groups with regard to the correlates of childhood emotional abuse. Childhood emotional abuse in the batterer group was significantly correlated with the beliefs that Wife Beating is Justified (r=0.44, p<0.01) and Wives Gain from Beating (r=0.41, p<0.01) but not with depression and marital dissatisfaction. The opposite was true in the control group. Childhood emotional abuse in the control group was significantly correlated with depression (r=0.43, p<0.01) and marital dissatisfaction (r=0.34, p<0.01) but not with positive attitudes towards marital violence. See Table 4 for more contrasts between the batterers and the controls with regard to the correlates of the four types of early exposure to violence in the family of origin.

Early exposure and positive attitudes towards marital violence emerged as two pathways to marital violence after controlling for sociodemographic variables, marital dissatisfaction, and after controlling for each other as well Stepwise multiple regressions were employed to examine the relative weight of early exposure and positive attitudes towards marital violence in predicting IPV after controlling for other related variables. Variables that were correlated with IPV at or above the p<0.05 level were included in the regression analysis. Using all the participants as one group, including domestically violent men recruited from the community, 13 variables were found to be significantly correlated with IPV. Of the 13 variables, five variables were negatively correlated with IPV. All of these were sociodemographic variables. Eight variables were positively correlated with IPV. Those were variables of marital dissatisfaction, early exposure to violence in the family of origin, and positive attitudes towards marital violence.

Depression and acculturation were not significantly correlated with IPV and were therefore not included in the regression analysis. Ten other variables were also excluded from the regression analysis as they were not significantly correlated with IPV. These were age, spouse's age, spouse's income, spouse's income change after immigration, educa-

Table 4 Batterers vs. controls: correlations between four types of early exposure and positive attitudes towards marital violence, depression, and marital dissatisfaction

		WB justified	WB gain	Depression	Marital dis.
P abuse	Batterers	0.38 <sup>a</sup>	$0.36^{a}$	0.01	0.23
	Controls	0.04	0.12	0.24	0.15
E abuse	Batterers	0.44 <sup>a</sup>	0.41 <sup>a</sup>	0.15	0.25
	Controls	0.04	0.09	0.43 <sup>a</sup>	$0.34^{a}$
S abuse	Batterers	$0.35^{a}$	0.18	0.18	0.09
	Controls	-0.13	$-0.26^{b}$	-0.03	0.11
Witness V	Batterers	0.11	$0.28^{\rm b}$	-0.05	$0.26^{b}$
	Controls	0.20	0.19	0.18	0.13

P Physical, E Emotional, S Sexual, V Violence, WB Justified Wife Beating Is Justified, WB Gain Wives Gain From Beating, and Marital dis. Marital Dissatisfaction.



<sup>&</sup>lt;sup>a</sup> Significant at the 0.01 level.

<sup>&</sup>lt;sup>b</sup> Significant at the 0.05 level (2-tailed).

tion, spouse's education, immigration status, identification with heritage culture, witnessing violence as a child, and the belief the Offender Should Not Be Punished. Table 5 listed the 13 variables that were significantly correlated with IPV.

The five sociodemographic variables were entered first in the stepwise multiple regressions analysis. Participants' income, their income change after immigration, their spouses' immigration status, their years in the US, and their spouses' years in the US together accounted for 10.7% of the variance in IPV. Entered second, marital dissatisfaction accounted for 12.6% of the variance in IPV over and above the sociodemographic variables. Entered in the third step, childhood physical, emotional, and sexual abuse together accounted for 11.6% of the variance in IPV over and above sociodemographic variables and marital dissatisfaction. Entered in the fourth step, the beliefs that Wife Beating Is Justified, that Wives Gain From Beating, that No Help Should Be Given, and that Offenders Should Not Be Responsible together accounted for 10.3% of the variance in IPV over and above sociodemographic variables, marital dissatisfaction variable, and early exposure. This multivariate model accounted for 45.2% of the variance in IPV in our sample (see Table 6).

Finally, early exposure to violence in the family of origin accounted for 11% of the variance in IPV over and above sociodemographic variables, marital dissatisfaction, and positive attitudes towards marital violence, p < 0.01., when it was entered in the last step of the above stepwise regression analysis.

Stepwise multiple regressions were also conducted to examine the two pathways within the batterer group. Nine risk and control variables were found to be significantly correlated with IPV at or above p<0.05 level in the batterer

**Table 5** Risk/control variables that were significantly correlated with IPV in the group of all participants

Variables	IPV
Income	-0.21 <sup>b</sup>
Change in income after immigration	$-0.25^{a}$
Spouse's immigration status	$-0.18^{b}$
Years in the US	$-0.23^{b}$
Spouse's years in the US	$-0.22^{b}$
Marital dissatisfaction	0.39 <sup>a</sup>
Emotional abuse	0.38 <sup>a</sup>
Physical abuse	$0.40^{a}$
Sexual abuse	0.35 <sup>a</sup>
Help should not be given	$0.30^{a}$
Offender is not responsible	$0.30^{a}$
Wives gain from beating	0.28 <sup>a</sup>
Wife beating is justified	$0.37^{a}$

a *P*<0.01.

<sup>&</sup>lt;sup>b</sup> P<0.05.



Table 6 Summary of stepwise multiple regression analysis

	Marital violence (IPV)		
	Beta	$R^2$	$\Delta R^2$
Step 1 (Sociodemographic variables)		0.107	0.107 <sup>b</sup>
Income	-0.11		
Income change after Immigration	-0.11		
Spouse's Immigration status	-0.08		
Years of living in the US	-0.14		
Spouse's years of living in the US	-0.03		
Step 2 (Marital dissatisfaction)		0.232	$0.126^{a}$
Marital dissatisfaction	$0.37^{a}$		
Step 3 (Early exposure to family violence)		0.349	0.116 <sup>a</sup>
Childhood physical abuse	0.07		
Emotional abuse	-0.01		
Sexual abuse	$0.31^{b}$		
Step 4 (Positive attitudes towards marital violence)		0.452	0.103 <sup>a</sup>
Wife beating is justified	0.14		
Wives gain from beating	-0.17		
Help should not be given	$0.32^{a}$		
Offender is not responsible	-0.02		

<sup>&</sup>lt;sup>a</sup> P<0.01.

group. These nine variables fell into three categories. They were marital dissatisfaction (r=0.32, p<0.05), early exposure to violence in the family of origin (emotional abuse, r=0.45, physical abuse, r=0.56, sexual abuse, r=0.45, p<0.01; witnessing parents' marital violence, r=0.31, p<0.05), and positive attitudes towards marital violence (Wife Beating Is Justified, r=0.42, p<0.01; Wives Gain From Beating, r=0.26, Help Should Not Be Given, r=0.26, and Offender Is Not Responsible, r=0.26, p<0.05). Unlike in the group of all participants, however, none of the sociodemographic variables were significantly correlated with IPV in the batterer group.

Within the batterer group, marital dissatisfaction accounted for 9.2% of the variance in IPV when it was entered in the first step of the regression analysis. Entered in the second step of the regression analysis, the four types of early exposure to violence in the family of origin together accounted for 8.6% of the variance in IPV above and beyond marital dissatisfaction. The four positive attitudes towards marital violence combined accounted for 16.3% of the variance in IPV above and beyond marital dissatisfaction and early exposure to violence in the family of origin, when they were entered in the last step of the regression analysis.

The effect of early exposure to violence in the family of origin on marital violence was found to be slightly mediated by positive attitudes towards marital violence The recommended

 $<sup>^{\</sup>rm b}P$ < 0.05.

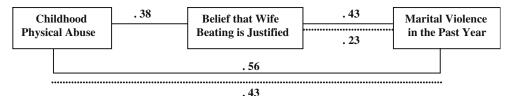


Fig. 1 Positive attitudes towards marital violence as a mediator of early exposure on IPV in the group of batterers. Note: *Solid lines* represent unmediated relationships and *dotted lines* represent mediated analyses. All parameter estimates are significant at p<0.05

procedure for testing for mediation was to carry out three separate regression equations (Baron and Kenny 1986). A mediating effect would be evident if the effect of the independent variable on the dependent variable was reduced after controlling for the mediator. However, in a multiple regression analysis with three variables, this can be accomplished by simply looking at the partial or part correlation of the independent variable with the dependent variable after controlling for the mediator. The extent to which the partial or part correlation is lowered is the extent to which the mediator has an effect on the independent variable.<sup>3</sup>

For the purpose of clarity, we used childhood physical abuse as early exposure to violence in the family of origin, the belief that wife beating is justified to represent positive attitudes towards marital violence, and violence against a spouse in the past year as the dependent variable in our multiple regression analysis. We examined the medicating effect of positive attitudes towards marital violence in our batterer group by looking at the part correlation of childhood physical abuse with violence against a spouse in the past year after controlling for the belief that wife beating is justified.<sup>4</sup>

As shown in Fig. 1, the part correlation between childhood physical abuse and IPV in the past year was lowered but still significant, after controlling for the belief that wife beating is justified, indicating only partial mediating effect by positive attitudes towards marital violence on early exposure. Likewise, the part correlation of the belief that wife beating is justified with IPV in the past year was lowered but still significant, after controlling for childhood physical abuse.

To summarize, early exposure to violence in the family of origin was widespread and was significantly positively correlated with marital violence in our sample of Chinese male immigrants. However, early exposure alone did not differentiate Chinese immigrant male batterers from nonviolent Chinese immigrant men. Early exposure in the batterers was significantly correlated with positive attitudes toward marital violence. Early exposure in the controls was significantly correlated with depression, as predicted by our supplemental hypothesis. Early exposure and positive attitudes towards marital violence emerged as two pathways to IPV after controlling for sociodemographic variables, marital dissatisfaction, and each other. Finally, the effect of early exposure on IPV was slightly mediated by positive attitudes towards marital violence. The effect of positive attitudes towards marital violence on IPV was also mediated by early exposure. As we had predicted, the two risk factors together accounted for more variance in IPV than either one alone.

### **Discussion**

The link between early exposure to family violence and IPV was established in a national representative sample and found to be more significant in ethnic minorities (Schafer et al. 2004). However, previous studies only examined this link in African American, Hispanic, and White samples. Ours was the first empirical study examining this link in Chinese batterers, to our best knowledge.

Early exposure was significantly correlated with IPV in our Chinese immigrant sample, supporting the social learning theory of domestic violence (Bandura 1979; Wildow 1997). However, unlike in some other studies where batterers reported more early exposure than the controls (Dutton and Hart 1992; Rosenbaum and O'Leary 1981), the Chinese immigrant male batterers and the controls in our study were almost equally exposed to violence in the family of origin. This finding was not a surprise, given that corporal punishment was widespread in Asian societies (Doe 2000; Ho 1986). Although efforts have been made to differentiate corporal punishment form physical abuse, most researchers view them as different degrees on a continuum of physical acts toward children (Gershoff 2002). Meta-analyses of correlates of corporal punishment revealed that, like childhood physical abuse, corporal punishment was associated with increased child aggression,



<sup>&</sup>lt;sup>3</sup> We would like to thank Patrick Ross, Ph.D., for directing us to this simple way of examining the mediating effect among our three variables.

<sup>&</sup>lt;sup>4</sup> We chose part correlation, because by squaring the part correlation coefficients, our results would be identical to the results from testing three separate regression equations as recommended by Baron and Kenny (1986).

increased adult aggression, and increased risk of abusing one's own child and spouse (Gershoff 2002).

Of course, this does not mean that corporal punishment and physical abuse carry the same weight in predicting IPV. As physical abuse is more detrimental to the child, one may predict a stronger link between physical abuse and IPV. However, the opposite may be true in a society where corporal punishment is more tolerated than physical abuse (i.e., modeling and imitation may be more likely to follow if a behavior is rationalized). Future studies need to compare corporal punishment and physical abuse in terms of their relative weight in accounting for IPV.

The need for mental health workers to explore the history of exposure to family violence in working with Asian families was suggested by our finding that early exposure had a significant adverse impact on both the batterers and the controls. While early exposure was significantly correlated with IPV and positive attitudes towards marital violence in our Chinese male batterer group, it was significantly correlated with depression in our control group. As corporal punishment was documented as widespread in the Asian communities, psychoeducation on the consequences of early exposure to violence is very much needed.

Men aggress against their mates for varied reasons, and therefore it is important to look into the relative importance of various risk factors (O'Leary and Curley 1986). The finding that childhood physical abuse alone did not differentiate the Chinese male batterers from the controls suggests the need to examine other variables such as positive attitudes towards IPV simultaneously and to develop a multivariate model of risk factors in male batterers.

Positive attitudes towards marital violence were found to be a powerful risk factor for IPV in our study. It was not only significantly correlated with IPV in the group of all participants but also sufficient to differentiate the Chinese male batterers from the controls. To effectively eliminate this risk factor, educators, social workers, psychologists, journalists, and others who play a significant role in delivering education and information need to actively repudiate positive attitudes toward marital violence. In addition, attitude change needs to be incorporated in treatment programs for Asian male batterers. Successful treatment should lead to negative attitudes towards marital violence. Attitude change can thus serve as a measurement for treatment outcome.

Positive attitudes towards marital violence need to be further examined in future studies. Positive attitudes towards marital violence were found to be at least partly rooted in the batterers' early exposure to violence in the family of origin in our study. A challenging question is why, being almost equally exposed to violence in the family of origin, some developed more positive attitudes toward marital violence than the others. An Asian family violence survey in Boston

(Yoshioka 2000) found that while the number of adults who reported being hit regularly as a child was high in both the Chinese group (61%) and the Korean group (80%), more Chinese adults agreed with the statement that some wives ask for beatings than Korean adults (22.9 vs. 5.8%). Future studies may include Korean male batterers as a comparison group (i.e., batterers who were equally exposed to family violence but were from a different background) to examine the role that the batterers' respective heritage cultures, among other factors, may have played in the formation of positive attitudes towards marital violence.

An even greater challenge in future studies is to understand why within the same culture, some victims of early exposure developed more positive attitudes towards marital violence than the others (i.e., the Chinese male batterers vs. the controls in this study). The answer to this challenge may be found through examination of how the batterers' early exposure interacted with other variables in developing or not developing positive attitudes towards marital violence. For example, it is possible that other significant people's attitudes towards marital violence may play a significant role in the child's development of positive attitudes towards marital violence. If a child was told, after being exposed to violence at home, by his grandma or his teacher that his father was wrong in hitting his mother or hitting him, the child might be less likely to develop positive attitudes towards marital violence. The quality of the child's relationship to the aggressor may also moderate the relationship between his exposure to family violence and his development of positive attitudes towards such violence.

Although there appears to be a temporal/causal relationship between early exposure to violence and positive attitudes towards marital violence and between these two risk factors and IPV, the cross-sectional and correlational nature of this study does not rule out other possible directions of the relationship among these three variables. It is possible that men are more likely to approve marital violence after battering their spouses. Longitudinal studies are needed to confirm the temporal/causal relationship between early exposure, positive attitudes towards marital violence, and IPV as specified by the social learning theory of domestic violence (Bandura 1979; Wildom 1997).

The 11% self-reported yearly marital violence rate in the community-recruited Chinese men (eight out of 70) was almost identical to the yearly incidence rate of husband-to-wife violence in two national studies which ranged from 11.3 to 12.1% (Straus and Gelles 1986; Straus et al. 1980). However, because our controls on average were older, had more years of education, made more money annually in the past year, and lived in the US for more years with higher immigration status than the batterers and because these sociodemographic differences were negatively correlated with marital violence, the yearly marital violence rate in the



Chinese community could be higher if a more representative sample was used.

In studies with the general population and other selected ethnic populations, age, income, and education, more often than not, were found to be negatively correlated with IPV (Holtzworth-Munroe et al. 1997; Schumacher et al. 2001). The between-group differences on these sociodemographic variables in this study were thus in line with the findings in the current literature and might very well reflect true between-group differences. However, because the current study required participants to fill out multiple questionnaires, though mostly of multiple choices and yes or no questions, it might have discouraged those who had less education and therefore created a possible selection bias. Future studies need to sort out sociodemographic differences caused by possible selection bias from sociodemographic differences that do exist between male batterers and non-violent men. It should also be noted that the relationship between early exposure, positive attitudes towards marital violence, and IPV was significant even after controlling for the sociodemographic variables in this study.

It took more than 2 years to collect the data in this study, but the sample size was still relatively small. In terms of recruiting control subjects from the community, the 12% response rate (70 out of the 600 Chinese male adults who were approached in this study) was less than ideal. Personal communication with some researchers who were familiar with recruiting research participants in the Asian community indicated that this response rate was not particularly low. A 20% response rate was reported in a study about Los Angeles County Chinese residents' gender role beliefs, acculturation, sociodemographic factors, and physical victimization by a spouse or intimate partner (Yick 2000). The higher response rate in that study could be due to its different method of data collection (i.e., telephone interview, instead of paper and pencil questionnaires, was used in that study). In contrast to the controls, 72% of the batterers agreed to participate in this study. Social desirability might be responsible for the batterers' higher response rate. Although, the Chinese immigrant male batterers were assured that refusal to participate in this study would not affect their treatment in the program, they might nevertheless think of participation in this study as indicative of their cooperation with the court-mandated treatment. Finally, the male batterers in this study were court-referred and might therefore be different from those batterers who had not been brought in by the police. Because of the above limitations, the findings of this study may not be generalized to the larger community without cautions.

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#### References

- Abraham, K. (1948). Notes on psychoanalytic investigation and treatment of manic-depressive insanity and applied conditions. In *Selected papers of Karl Abraham, M.D.* (D. Bryan & A. Strachey, Trans.). London: Hogarth. Original work published 1911.
- Bandura, A. (1979). The social learning perspective: Mechanisms of aggression. In H. Toch (Ed.), *Psychology of crime and criminal justice* (pp. 298–336). New York: Holt, Rihehart and Winston.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality* and Social Psychology, 51, 1173–1182.
- Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice. *Postgraduate Medicine*, 52(6), 81–85.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561–571.
- Bernstein, D. P., & Fink, L. (1998). Childhood trauma questionnaire manual. San Antonio, TX: Harcourt Brace.
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., et al. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *American Journal of Psychiatry*, 151, 1132–1136.
- Dibble, U., & Straus, M. A. (1980). Some social structure determinants of inconsistency between attitudes and behavior: The case of family violence. *Journal of Marriage and the Family*, 42, 71–80.
- Doe, S. S. (2000). Cultural factors in child maltreatment and domestic violence in Korea. Children and Youth Services Review, 22, 231–236.
- Drabman, R. S., & Thomas, M. H. (1974). Does media violence increase children's tolerance of real-life aggression? *Develop*mental Psychology, 10, 418–421.
- Dutton, D. G., & Hart, S. D. (1992). Evidence for long-term, specific effects of childhood abuse and neglect on criminal behavior in men. *International Journal of Offender Therapy and Compara*tive Criminology, 36, 129–137.
- Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of Consulting and Clinical Psychology*, 71, 741–753.
- Freud, A. (1946). The ego and the mechanisms of defense (C. Baines, Trans.). New York: International Universities.
- Freud, S. (1957). Mourning and melancholia. In J. Rickman (Ed.), A general selection from the works of Sigmund Freud. Garden City, NY: Doubleday. Original work published in 1917.
- Funk, J. B., Baldacci, H. B., Pasold, T., & Baumgardner, J. (2004). Violence exposure in real-life, video games, television, movies, and the internet: Is there desensitization? *Journal of Adolescence*, 27, 23–39.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, 128, 539–579.
- Gordon, M. (1964). Assimilation in American life: The role of race, religion and national origins. New York: Oxford University Press.
- Ho, D. Y. F. (1986). Chinese patterns of socialization: A critical review. In M. H. Bond (Ed.), *The psychology of the Chinese* people (pp. 1–37). New York: Oxford University Press.
- Holtzworth-Munroe, A., Bates, L., Smutzler, N., & Sandin, E. (1997a). A brief review of the research on husband violence (Part I: Maritally violent versus nonviolent men). Aggression and Violent Behavior, 2, 65–99.
- Holtzworth-Munroe, A., Smutzler, N., & Bates, L. (1997b). A brief review of the research on husband violence (Part III: Sociodemographic factors, relationship factors, and differing consequences of husband and wife violence). Aggression and Violent Behavior, 3, 285–307.



Hotaling, G. T., & Sugarman, D. B. (1986). An analysis of risk markers in husband to wife violence: The current state of knowledge. Violence and Victims, 1, 101–124.

- Hudson, W. W. (1982). The clinical measurement package: A field manual. Homewood, IL: Dorsey Press.
- Kalmuss, D. D. (1984). The intergenerational transmission of marital aggression. *Journal of Marriage and Family*, 46, 11–19.
- Kaufman, J., & Zigler, E. (1993). The intergenerational transmission of abuse is overstated. In R. J. Gells & D. R. Loseke (Eds.), *Current controversies on family violence* (pp. 209–221). London: Sage.
- Kaufman Kantor, G., Jasinski, J. L., & Aldarondo, E. (1994). Sociocultural status and incidence of marital violence in Hispanic families. *Violence and Victims*, 9, 207–222.
- Kraus, S. (1995). Attitudes and the prediction of behavior: Metaanalysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21, 58–75.
- MacEwen, K. E., & Barling, J. (1988). Multiple stressors, violence in the family of origin, and marital aggression: A longitudinal investigation. *Journal of Family Violence*, 3, 73–87.
- O'Leary, K. D., & Curley, A. D. (1986). Assertion and family violence: Correlates of spouse abuse. *Journal of Marital and Family Therapy*, 12, 281–289.
- O'Leary, K. D., Malone, J., & Tyree, A. (1994). Physical aggression in early marriage: Prerelationship and relationship effects. *Journal of Consulting and Clinical Psychology*, 62, 594–602.
- Rosenbaum, A., & O'Leary, K. D. (1981). Marital violence: Characteristics of abusive of abusive couples. *Journal of Consulting and Clinical Psychology*, 49, 63–71.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? *Journal of Personality and Social Psychology*, 79, 49–65.
- Saunders, D. G., Lynch, A. B., Grayson, M., & Linz, D. (1987). The inventory of beliefs about wife beating: The construction and initial validation of a measure of beliefs and attitudes. *Violence* and Victims, 2, 39–57.

- Schafer, J., Caetano, R., & Cunradi, C. B. (2004). A path model of risk factors for intimate partner violence among couples in the United States. *Journal of Interpersonal Violence*, 19, 127–142.
- Schumacher, J. A., Feldbau-Kohn, S., Slep, A. M. S., & Heyman, R. E. (2001). Risk factors for male-to-female partner physical abuse. Aggression and Violent Behavior, 6, 281–352.
- Snyder, M., & DeBono, K. G. (1989). Understanding the functions of attitudes: Lessons from personality and social behavior. In A. R. Pratkanis & S. J. Breckler, et al. (Eds.), *Attitude structure and function* (pp. 339–359). Hillsdale, NJ: Lawrence Erlbaum.
- Stith, S. M., & Farley, S. C. (1993). A predictive model of male spousal violence. *Journal of Family Violence*, 8, 183–201.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) scales. *Journal of Marriage and the Family*, 41, 75–88.
- Straus, M. A., & Gelles, R. J. (1986). Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *Journal of Marriage and the Family, 48*, 465–479.
- Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1980). Behind closed doors: Violence in the American family. New York: Anchor.
- Tang, C. S. (1994). Prevalence of spouse aggression in Hong Kong. Journal of Family Violence, 9, 347–356.
- White, H. R., & Widom, C. S. (2003). Intimate partner violence among abused and neglected children in young adulthood: The mediating effects of early aggression, antisocial personality, hostility and alcohol problems. Aggressive Behavior, 29, 332–345.
- Widow, C. S. (1997). Child abuse, neglect, and witnessing violence. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of antisocial behavior* (pp. 159–170). New York: Wiley.
- Yick, A. G. (2000). Predictors of physical spousal/intimate violence in Chinese American families. *Journal of Family Violence*, 15, 249–267.
- Yoshioka, M. R. (2000). The family violence report: A study of Cambodian, Chinese, Korean, South Asian, and Vietnamese communities in Massachusetts. Boston, MA: The Asian Task Force against Domestic Violence.

