Running head: Childhood Sexual Abuse and Adult Sexual Victimization

Full title: Association Between Childhood Sexual Abuse and Adult Sexual Victimization in a Representative Sample in Hong Kong Chinese

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ABSTRACT

Objective: The current study investigated the prevalence and impact of childhood sexual abuse (CSA) on adult sexual victimization (ASV) in Hong Kong, China. This study also examines correlates of demographic characteristics, depression, suicidal ideation and self-esteem with ASV. **Method:** A total of 5,049 Chinese adult respondents were interviewed face-to-face about their experiences of CSA, childhood witness of parental violence, ASV (by non-partner), and intimate partner violence (IPV). Self-reports also measured depression, suicidal ideation, self-esteem, and demographic details. **Results:** Of all respondents, 0.9% reported some form of CSA, with a higher percentage being women. CSA was found to pose a significant risk for preceding year IPV (sexual) after controlling for demographic factors. Gender, age, indebtedness, alcohol and drug abuse, depression, and low self-esteem significantly increased the odds of IPV (sexual), whereas suicidal ideation and being newly arrived from China increased the risk of ASV (by non-partner). Childhood witness of parental psychological aggression and physical violence were also associated with a higher risk of IPV (sexual). **Conclusions:** Childhood sexual abuse may have an independent association with future sexual victimization in adulthood, but many covariates can also affect the impact of CSA and increase the risk of revictimization. **Practical Implications:** Intervention with ASV should include an assessment of CSA history and thus a screening for multiple victimization from IPV among victims. Prevention of revictimization for IPV victims with CSA histories may focus on making social and individual changes.

Keywords: Child Sexual Abuse**;** Adult Sexual Victimization**;** Intimate Partner Violence; Suicidal Ideation

Childhood sexual abuse (CSA) is both a complex and traumatic life experience, and its effect on future victimization can be long-lasting. A growing body of research is studying the relationship between CSA and future sexual victimization in adulthood. CSA involves ranges of sexual acts with a victim who is legally considered a child, while the perpetrator takes a position of authority or power over the child (Paolucci, Genuis, & Violato, 2001; Putnam, 2003; Rind, Tromovitch, & Bauserman, 1998). While sexually abusive acts commonly include coercive or manipulative sexual contact (Heiman, 2004), some researchers have included noncontact sexual activity, which has yielded higher prevalence rates (Hunter, 2006). But the definition of CSA is hardly consensual. Research on this topic varies in sample type (college, clinical, military, community), data measures and collection (retrospective, cross-sectional, prospective), and most importantly, the ways in which the variables are defined (Marx, Heidt, & Gold, 2005). Culture is an important factor in defining CSA (Barnett, Miller-Perrin, & Perrin, 2005); for instance, interactions with children that are inappropriately sexual in North America may be acceptable for Asians (e.g., North Americans typically stop bathing their opposite-sex child after the age of 3-4, while many Asians continue to do so; Barnett et al., 2005). This lack of consensus in the definition of CSA has resulted in a wide range of reported prevalence, from 2% to 6%, but also a range of varying effects on revictimization (Gorey & Leslie, 2001; Roodman & Clum, 2001; Wyatt & Peters, 1986). But despite the inconsistency of these rates, CSA does have a consistent and reliable association with future revictimization within the literature (Marx et al., 2005; Pereda, Guilera, Forns, & Gomez-Benito, 2009).

The experience of CSA can create very negative and long-lasting distress both psychologically and interpersonally (Molnar, Buka, & Kessler, 2001). Some "sleeper effects" of childhood abuse do not manifest until late adolescence or even adulthood (Noll,

2008). Psychological problems associated with CSA include depression, suicide, dissociation, posttraumatic symptomatology, anxiety, isolation, stigmatization, low self-esteem, and higher rates of both psychological and personality disorders (Miner, Flitter, & Robinson, 2006; Ozbaran et al., 2009; Polusny & Follette, 1995). Such psychological sequelae can lead to various behavioral problems including substance abuse (Kendler et al., 2000; Ullman, 2009), maladaptive and high-risk sexual behavior (Steel & Herlitz, 2005; Van Bruggen, 2006), eating disorders (Rayworth, Wise, & Harlow, 2004), suicidal behaviors (Filipas & Ullman, 2006; Plunkett et al., 2001), social dysfunction, interpersonal difficulties, sexual dissatisfaction, and lower quality of romantic relationships (Briere & Runtz, 1990; Messman-Moore & Long, 1996, 2003; Polusny & Follette, 1995; Walker, Holman, & Busby, 2009).

Effects of CSA on adult victimization

Another outcome associated with CSA is the greater risk of both physical and sexual revictimization in later life (Arata, 2002). Physical victimization in adulthood tends to appear in the context of intimate relationships (Banyard, Arnold, & Smith, 2000; Campbell, Greeson, Bybee, & Raja, 2008; DiLillo, Giuffre, Tremblay, & Peterson, 2001). Abused women reported 1.6 times more physical affronts and instances of domestic violence than non-CSA victims (Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003; Putnam, 2003). An independent relationship has also been established between CSA and sexual revictimization in adulthood after controlling for confounding variables such as age, ethnic background, education, and so forth. Women who experienced unwanted sexual intercourse in childhood were 2 to 3 times more likely to be raped or sexually assaulted after age 16 (Barnes, Noll, Putnam, & Trickett, 2009; Coid, 2001; Hattery, 2009; Van Bruggen, 2006). Recent studies have also found that 2 out of 3 CSA victims will be revictimized in adulthood, and indeed

CSA victims report twice as many rapes and sexual assaults (Classen, Palesh, & Aggarwal, 2005; Noll et al., 2003). The revictimization of CSA victims is also more likely to be committed by older perpetrators and accompanied by physical injury and drug use by the victims (Barnes et al., 2009).

Associated factors of CSA and ASV

Adult sexual victimization (ASV) occurs when the victim of sexual abuse/assault is over the age of 18 (Messman-Moore & Long, 2003). A significant percentage of ASV is perpetrated by the victims' intimate partners (Campbell et al., 2008; Hattery, 2009). Whereas women who have not experienced CSA will usually leave their partner the first time they are struck, CSA survivors are significantly more likely to return to an abusive relationship (Griffing et al., 2005). Many risk factors contribute to the CSA victims' vulnerability to ASV. CSA victims have learned and engaged in maladaptive behaviors, beliefs, and attitudes, which lead to inappropriate dating, sexual behavior, and mate selection; they have greater acceptance of rape myths and sex-role stereotypes; they generally have lower self-esteem and make poorer relationship choices (Messman-Moore & Long, 2000; Miner et al., 2006; Van Bruggen, 2006); and they have greater difficulties in communication, intimacy trust, and sexual functioning (DiLillo et al., 2001). CSA women with limited economic resources are especially vulnerable to abuse in adulthood because they tend to jump into marriage at a young age, usually with much older men, in hope of escaping from their negative past. They expect these "survival" strategies to protect them from unpredictable violence or sexual abuse from the outside world, but instead their partners turn out to be abusive themselves (Hattery, 2009).

Many CSA victims show incredible resilience and manage to escape the resulting disadvantages and revictimization. They strive to develop positive self-esteem, social

support from a stable home environment, and success in other areas such as work, education, and relationships (Hilton, 1996; Noll, 2008). Despite the strong link between CSA and ASV, CSA is not the sole causal agent. Adult revictimization of CSA victims can be explained by risk factors mediating the impact of CSA on ASV. Other variables can also increase the harm and impact of CSA and future adult victimization (Tromovitch, 2007). For instance, CSA and ASV are both fundamentally gendered. Women are especially vulnerable to future victimization, with a risk 2.3 to 3 times higher than that for men (Banyard, Williams, & Siegel, 2004; Barnes et al., 2009; Putnam, 2003). Childhood sexual victimization has a unique impact on women and the way it shapes their development as young women (Wesely, 2006).

Age at the time of the initial CSA occurrence is also important. Although some legal definitions of a child include those 15 to 17 years old, adolescents abused at this age differ significantly from smaller children both psychologically and physically (Tromovitch, 2007). Both sexual and physical revictimization in adulthood are associated with higher age (Noll et al., 2003; Putnam, 2003). Sexual abuse during adolescence (15-18 years old) places victims at a higher risk of adult victimization compared with CSA occurring before age 15 (Classen et al., 2005). The highest risk for ASV is among those CSA victims who were revictimized as adolescents (Arata, 2002). A dysfunctional family background and low socioeconomic status also increase the likelihood of victimization in adulthood. Physical revictimization is associated with lower socioeconomic status and ethnic minority status (Classen et al., 2005; Noll et al., 2003; Putnam, 2003). Children in families with vulnerability factors, including hostile relationships and physical violence between parents and child, also place a CSA victim at an increased risk for revictimization (Hilton, 1996; Jankowski, Leitenberg, Henning, & Coffey, 2002; Thompson, Arias, Basile, & Desai, 2002).

Existing studies of the association between CSA and ASV have been based mainly on studies conducted in the American population. Few Asian studies examining the patterns of CSA and ASV, as well as associated factors, have been conducted. This study made use of data collected from a Chinese population to investigate the impact of CSA on ASV. It is hypothesized that CSA would increase the likelihood of ASV perpetrated by intimate partners and others, after controlling for covariates including demographic factors such as age, gender, education, and socioeconomic status, and family risk factors such as psychological aggression and physical violence within the household. It is also expected demographic factors and family risk factors to affect the association between CSA and ASV.

METHOD

Sample and Sampling

We drew our data from a representative population study carried out in Hong Kong in 2004. A total of 4,347 valid households were randomly sampled from the Register of Quarters maintained by the Census and Statistics Department of the Government of Hong Kong, which is the most up-to-date and complete sampling frame available in Hong Kong. A stratified sample design by geographical areas was adopted, and sampling units were selected using a systematic replicated sampling technique, with fixed sampling intervals and nonrepetitive random numbers. The use of replicated sampling facilitated the calculation of sampling errors and ensured that the required effective sample size would be met by adjusting the number of replicates used. Of these 3,049 quarters were successfully enumerated, representing a response rate of 70%. Nonparticipation included both refusals to respond (20%) and failure to contact potential respondents (10%).

Family members who met the selection criteria during the study period were all invited to participate. Eligible respondents for this study were aged 16 or above, gave their informed

consent, were married or cohabitating, were with or without children, and were Cantonese, Putonghua, or English speaking. They were interviewed face-to-face in their household by interviewers who were trained to conduct household research interviews. The eligible members from the same family were interviewed one by one separately by the same interviewer. Each interview lasted for about one hour. A research unit that specializes in conducting face-to-face household surveys was responsible for employing and training about 100 interviewers. The author provided additional training on ethical procedures for handling respondents reporting incidents of violence. During the interview, the interviewers would guide the respondents to respond to the questions. For sensitive questions like abuse and victimization, the respondents would self-administer the questionnaires and sealed this section of the questionnaire in an envelope. The responses of the sensitive questions would not be disclosed to the interviewers. The procedures were approved by the ethics committee of the University of Hong Kong.

The study employed a representative sample of 5,049 adult respondents. About 46.4% of the respondents were male and 53.6% were female. Almost all (99.5%) were Chinese. About 90% were married and 6.6% were widowed. The mean ages of male (50.6) and female (48.7) respondents differed significantly in the sample, as did their education level, with more women having a Secondary 3 education or below and more men having a tertiary education or above. In addition, a higher percentage of women were widowed (9.9%) compared with men (2.7%), and new arrivals from Mainland China consisted of more women (7.4%) than men (1.4%). Moreover, half the women had no income (53.3%), while over half the men had an income of HK$5,000 or above (64.1%); twice as many men as women had the same income. But more men were unemployed and in debt. Table 1 lists further details of the demographic characteristics of the respondents.

[Table 1 about here]

Measures

Intimate Partner violence. We used the Revised Conflict Tactics Scale (CTS2) to measure the prevalence of intimate partner violence (IPV) in terms of lifetime and the preceding year. The CTS2 covers five aspects of spousal conflict: negotiation, physical assault, psychological aggression, physical injury, and sexual violence, with both satisfactory psychometric characteristics (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) and high cross-cultural reliability (Straus, 2004). The internal consistency reliability of the CTS2 scales is generally high, with an alpha coefficient ranging from .79 to .95 (Straus et al., 1996). In terms of criterion validity, an increasing severity of tactics has been shown to correlate with increasing severity of injury (Coben, Forjuoh, & Gondolf, 1999). The CTS2 was translated into Chinese by the first author and validated using Hong Kong data (Chan, 2004). In this study, the Chinese translation of the CTS2 showed satisfactory reliability (α ranging from .88 to .96).

We computed the subscales of physical assault, psychological aggression, and sexual violence within a specified time frame before the interview. Incident-recall was restricted to two time frames: the preceding year and the lifetime of the relationship. Respondents who reported having committed any act of physical assault against their partner in the preceding year or at any point within the lifetime of their relationship were coded as having perpetrated IPV (physical). We applied a similar coding approach to psychological aggression (IPV psychological) and sexual violence (IPV sexual).

Childhood-witnessed parental violence. Respondents were asked if they had witnessed physical assault, psychological aggression, or injuries caused between their parents during their childhood. All items of the physical assault, psychological aggression, and injury scales of the CTS2 were listed for their reference. Respondents who reported any of the physical assault or injury acts between their parents were coded as having witnessed

parental physical violence and injury; they were also asked to list which acts they had seen. We applied a similar coding approach to psychological aggression.

Childhood sexual abuse and adult sexual victimization (by non-partner). Respondents were asked about three items: (a) unwanted touch: if they had ever been forced to touch someone in a sexual way, or someone had touched them in a sexual way; (b) forced sex: if they had ever been forced to have anal or oral sex with someone; and (c) sexual coercion: if someone had carried out other behaviors with them that they considered or interpreted as sexual coercion. If a respondent reported having ever experienced one of the three items, he or she would be asked whether that incident happened in his or her childhood (age below 18) or in adulthood (age 18 or above). They were coded as childhood sexual abuse (CSA) and adult sexual victimization (ASV) by non-partner. The victim's relationship with the perpetrator was coded as relatives/friends, strangers, or core family members. In this paper, ASV (by non-partner) was coded as sexual victimization in adulthood which did not include partner as perpetrator (i.e. IPV (sexual))

Suicidal ideation. We extracted one item from the depression scale of the Personal and Relationship Profile (PRP) to assess the dimension of suicidal ideation ("I have thought about killing myself"). This consisted of a four-response set ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). We created a binary variable (*strongly disagree*, *disagree*) versus (*agree*, *strongly agree*) to show the occurrence of suicidal ideation.

Depression. We measured depression using the depression scale of the PRP (Straus, Hamby, Boney-McCoy, & Sugarman, 1999). This consists of eight items such as "I am so sad, sometimes I wonder why I bother to go on living," "I feel sad quite often," "I am generally in a good mood," and "My life is generally going well." The PRP is a self-report multiscale instrument that provides a profile of scores of variables that have been proven to be associated with physical violence against a spouse in a marital, cohabiting, or dating

relationship. The validity and reliability of the PRP is satisfactory (Straus & Mouradian, 1999). The internal consistency reliability of the depression scale of the PRP is .84. In this study, internal consistency reliability of the depression scale was 0.72.

Self-esteem. We measured the self-esteem of the respondents with the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This is a 10-item Likert scale with items answered on a 4-point scale ranging from *strongly agree* to *strongly disagree*. The scores for the 10 items are then summed; the higher the score, the higher the respondent's self-esteem. The internal consistency reliability of the self-esteem scale in this study was 0.73.

The Demographic Questionnaire was used to detect the demographic and socioeconomic characteristics of the respondents. The questionnaire included items asking for information about the respondent's age, education level, marital status, whether she or he was a new arrival to Hong Kong, work status and monthly income, whether she or he was receiving social security, whether she or he had indebtedness, and whether she or he was alcoholic or drug abuser.

Statistical Analyses

We conducted the data analyses in two stages. The first stage consisted of descriptive analyses, where we compared bivariate relationships using a chi square test and *t* test to document the prevalence of violence reported by male and female respondents. The second employed multiple logistic regression to assess the impact of CSA, IPV victimization, and childhood witness of parental violence, and to determine their importance in understanding the increased risk of partner sexual violence and ASV (by non-partner). A structured multiphase logistic regression analysis was performed with sequential causal relationships between the variables (Chan, Brownridge, Tiwari, Fong, & Leung, 2008). Logistic regression is the appropriate tool to predict a dichotomous dependent variable from a set of independent variables. An odds ratio greater than 1.00 indicates that the independent variable is

associated with an increase in the odds of the dependent variable. An odds ratio below 1.00 indicates that the independent variable is associated with a decrease in the odds of the dependent variable. The nominal level of significance was taken as 5%. We used SPSS version 17 for the statistical analysis.

RESULTS

Prevalence

Table 2 shows the prevalence of CSA and ASV (by non-partner) for both male and female respondents. Overall, 0.9% reported some form of CSA (including unwanted touch, forced sex, or sexual coercion). Unwanted touch (0.7%) was more prevalent than forced sex (0.2%) for both genders. CSA was likely to be perpetrated by someone the victim knew; about 65% were family members, relatives, or friends. Similar to CSA, the most prevalent form of ASV (by non-partner) was unwanted touch (0.4%), followed by forced sex (0.2%) and sexual coercion (0.2%). But the most common perpetrator-victim relationship of adult victimization was that of strangers (63.9%), followed by relatives or friends (22.2%), and family members (13.9%).

[Table 2 about here]

Table 3 presents the prevalence of IPV victimization, childhood witness of parental violence, and suicidal ideation. IPV (sexual) victimization was significantly more prevalent among females in terms of both lifetime (8.9%) and the preceding year (4.0%). Male and female respondents did not differ significantly in the total amount of IPV (physical) victimization by a partner in either the lifetime or the preceding year. But women reported significantly more lifetime IPV (physical) victimization that was severe (4.6%) compared with men (3.1%). The prevalence of IPV (psychological) victimization by a partner was similarly high among male and female respondents. More than half the sample reported some IPV (psychological) victimization by their partner in their lifetime (57.2%), followed by

severe IPV (psychological) victimization in their lifetime (42.7%; see Table 3). Suicidal ideation was significantly higher in women (11.5%) compared with men (8.2%), but no gender difference was found in childhood witnessing of parental psychological aggression, physical violence, or injury.

[Table 3 about here]

Logistic Regression

Phase 1 in Table 4 presents the association between demographic correlates, IPV (sexual) and ASV (by non-partner). The results showed that after controlling for all other variables, being female significantly increased the odds of IPV (sexual) in both the lifetime (aOR = 2.164; 95% CI = 1.665, 2.812) and the preceding year (aOR = 2.103; 95% CI = 1.444, 3.062).

Age was associated with decreased odds of IPV (sexual) in the preceding year (aOR = 0.971; 95% CI = 0.955, 0.987), while being widowed increased the odds of lifetime IPV (sexual) (aOR = 1.819; 95% CI = 1.088, 3.04) after controlling for all other variables. Other correlates that remained significantly associated with IPV (sexual) after controlling for other variables, in both the lifetime and the preceding year, included indebtedness, alcohol abuse, and drug abuse. The odds of ASV (by non-partner) were significantly increased by being a new arrival from Mainland China (aOR = 4.151; 95% CI = 1.444, 11.932) after controlling for all other variables. But education and unemployment showed no significant association with any sort of sexual victimization.

[Table 4 about here]

Phase 2 in Table 4 shows the odds ratios of various types of victimization of the respondents after controlling for all demographic variables listed in Phase 1. We hypothesized that the variables in Phase 1 may affect the variables in Phase 2, but not vice versa. Phase 1 of the analysis was a logistic regression of all variables in Phase 1. In Phase 2, a logistic regression was performed on individual variable after force entering those variables

in the Phase 1 analysis. CSA posed a significant risk for lifetime IPV (sexual), but the odds became insignificant after controlling for demographic variables. It did remain a significant risk for IPV (sexual) in the preceding year after controlling for all variables (aOR = 3.301; 95% CI = 1.301, 8.374).

All forms of IPV physical and psychological victimization remained significant in all types of IPV (sexual) and ASV (by non-partner) after controlling for demographic variables. Severe lifetime IPV (physical) victimization posed the highest risk for lifetime IPV (sexual) (aOR = 23.374; 95% CI = 16.487, 33.136), followed by severe IPV (physical) victimization in the preceding year, which had the highest risk for IPV (sexual) in the preceding year (aOR = 19.461; 95% CI = 10.862, 34.866). Childhood witnessing of parental psychological aggression, parental physical violence, and injury significantly increased the odds of IPV (sexual) victimization after controlling for demographic variables, of which only childhood witnessing of parental psychological aggression posed a risk for ASV (by non-partner). Suicidal ideation was associated with increased odds of both IPV (sexual) and ASV (by non-partner). Self-esteem showed the smallest increased odds of IPV (sexual) compared with others, and depression was associated only with higher odds in lifetime IPV (sexual) (aOR = 1.662; 95% CI = 1.27, 2.176).

DISCUSSION

Hypotheses testing

Our findings show that a history of CSA is associated with a higher risk of sexual victimization by a partner in adulthood. This confirmed our hypothesis that while CSA has a significant impact on future sexual victimization in adulthood, in particular, the preceding year IPV (sexual). It is not the sole causal agent; many other variables also affect the impact of CSA (Tromovitch, 2007). The family environment in childhood and multiple victimization are important predictors of sexual revictimization (Classen et al., 2005; Messman-Moore &

Long, 2003). Our results further show that having witnessed parental physical and psychological aggression in childhood significantly increased the risks of sexual victimization by an intimate partner. A concurrence of physical and psychological abuse was also highly associated with IPV (sexual) and ASV (by non-partner). Although psychological factors such as depression and low self-esteem were associated with IPV (sexual), they could be the sequelae of IPV rather than risk factors themselves, since studies have shown that women who experienced CSA and revictimization in adulthood had higher levels of psychological and emotional disturbance than women who experienced CSA alone (Miner et al., 2006).

This study provided a strong representative sample with both male and female self-reports, which allowed gender comparison and a clear portrayal of CSA and ASV prevalence in the Chinese population. Consistent with other studies, the results showed a higher prevalence of CSA in women in this population (Putnam, 2003). Overall, CSA was most commonly perpetrated by someone the victims knew—relatives, friends, or family members. The most prevalent form of CSA was unwanted touch, which was also true for ASV, but ASV was most commonly perpetrated by strangers. Although we found no gender differences in the overall prevalence of ASV (by non-partner), women did report more IPV (sexual) and IPV (physical) victimization. This confirmed findings from other studies that women are at a higher risk of revictimization in IPV only and not by strangers (Hattery, 2009). Psychological abuse was the most common type of victimization in IPV, with over half the sample experiencing some form of such abuse by their partner.

Parallel to other studies, our findings suggest that demographic factors also play an important role in the risk for revictimization. Age, indebtedness, alcohol, and drug abuse were all associated with an increased risk of IPV (sexual) victimization. But education and unemployment were not associated with any ASV (by non-partner), contrary to some studies

that have claimed social and economic disadvantage to be a risk factor for IPV (Campbell et al., 2008; West, 2004). Being a new arrival from Mainland China is a unique demographic characteristic in Hong Kong, and the results showed that these newcomers were at greater risk of ASV (by non-partner). One possible explanation is that their unfamiliarity with the city and a lack of social support increase their exposure to dangerous situations. But that point will require further study and investigation.

Limitations

This study has certain limitations. First, CSA was defined by only a few items in the interview (unwanted touch, sexual coercion, forced sex). It did not include other forms of sexual abuse like sexual harassment or vaginal sex. The lack of a detailed assessment may result in underreported prevalence when compared to other Chinese studies which reported at least some types of noncontact sexual event, including genital exposure, witnessing masturbation, attempted vaginal penetration, touched or fondled their breasts or genitals (Chan, 2009). The low reporting rate was also found in other study which recorded 1% of sexual penetration (Chen, Dunne, & Han, 2004). A low reporting rate for CSA in Chinese societies has been noted by various researchers (Ho & Mak, 1992; Ma, Yau, Ng, & Tong, 2004; Ross et al., 2005). They suggested that family shame and the insensitivity of professionals could account for the lack of disclosure, and thus the low figure for reported incidents (Ho & Kwok, 1991). However, direct comparison of the findings should be careful because there were varying definitions and non-representative samples, used in previous studies (Chan, 2009). Although the low reporting rate for CSA may make the estimation of prevalence rate of CSA difficult, it would not change the findings regarding the impact of CSA on ASV.

The second limitation is the cross-sectional comparability of the study. Despite confirmation of the significant association between CSA and ASV, the study was unable to

establish causal relationships between the variables, including ASV and the covariates, in the absence of a temporal dimension.

Implications

Although studies, including this one, have established the pervasiveness of sexual revictimization among CSA victims, little is known about the strategies to prevent it (Macy, 2007). Conventional rape prevention programs may be efficacious for women without CSA histories, but may not be helpful for women who have experienced CSA and revictimization (Marx, Calhoun, Wilson, & Meyerson, 2001). CSA victims who have already been revictimized possess accumulated sequelae from their first abuse experience in childhood and subsequent abuses in adulthood. Victims who simultaneously face sexual, physical, and psychological abuse from their intimate partner are particularly at risk for continuous revictimization. Therefore, when treating IPV victims, it is important to screen for multiple victimization, as a concurrence of physical and psychological intimate partner abuse not only puts victims at a higher risk of sexual victimization by their own partner, but also by people outside their home.

It is also important to screen for CSA victims among IPV victims. CSA is undoubtedly a significant risk factor for future revictimization, but it is also a life experience that cannot be erased. Nevertheless, many negative aspects of the victims' lives that contribute to this vulnerability are certainly reversible. Therefore, intervention for IPV victims with CSA histories should focus on social and individual changes, such as rebuilding a positive self-esteem, preventing suicide, undergoing rehabilitation for alcohol or drug abuse, achieving closure for childhood-witnessed traumas, regaining financial control and stability, and obtaining better access to and utilization of social and economic resources.

This study has not only confirmed the increased risk that CSA poses for future sexual victimization by a partner in the Chinese population, but has also identified specific factors

associated with vulnerability to revictimization among Chinese men and women. CSA victims who are revictimized recurrently are trapped in clusters of negative circumstances as a result of the abuse, which further increases their vulnerability. To break out of the revictimization cycle, they need an intervention program that repairs their disadvantageous circumstances.

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Table 1

Demographic Characteristics of Respondents

	All	Male	Female	χ^2 / t-test
Age (mean, *SD*)	49.6 (13.9)	50.6 (13.5)	48.7 (14.1)	0.000***
Education				0.000***
Secondary 3 or below	62.4%	59.5%	64.9%	
Secondary 4 - 7	28.1%	28.9%	27.4%	
Tertiary or above	9.5%	11.6%	7.8%	
Marital status				0.000***
Married/cohabiting	90.1%	95.0%	85.8%	
Widow	6.6%	2.7%	9.9%	
Divorced/separated	3.3%	2.2%	4.3%	
New arrival from Mainland China	4.6%	1.4%	7.4%	0.000***
Unemployed	5.2%	7.2%	3.5%	0.000***
Income group				0.000***
No income	41.5%	27.7%	53.3%	
HK$4,999 or below	10.1%	8.2%	11.8%	
HK$5,000 or above	48.4%	64.1%	34.9%	
Receiving social security	7.6%	7.8%	7.4%	0.602
Indebtedness	5.2%	6.2%	4.4%	0.005**

Statistically significant (** $p < 0.01$; *** $p < 0.001$)

Table 2

Prevalence of Adult Sexual Victimization (ASV) by non-partners

	Total		Male		Female		*t* test
	n	%	n	%	n	%	
Lifetime prevalence of CSA							
Unwanted touch	34	0.7	10	0.4	24	0.9	0.820
Forced sex	9	0.2	3	0.1	6	0.2	
Overall	43	0.9	13	0.6	30	1.1	0.033*
Perpetrator-victim relationship							0.749
Relatives/friends	22	51.2	8	61.5	14	46.7	
Strangers	15	34.9	4	30.8	11	36.6	
Core family members	6	14.0	1	7.7	5	16.7	
Lifetime prevalence of ASV (by non-partner)							
Unwanted touch	18	0.4	8	0.3	10	0.4	0.347
Forced sex	10	0.2	5	0.2	5	0.2	
Sexual coercion	8	0.2	6	0.3	2	0.07	
Overall	36	0.7	19	0.8	17	0.6	0.439
Perpetrator-victim relationship							0.429
Relatives/friends	8	22.2	5	26.3	3	17.6	
Strangers	23	63.9	13	68.4	10	58.8	
Core family members	5	13.9	1	5.3	4	23.5	

Statistically significant (*$p < 0.05$)

Table 3

Lifetime and Preceding-Year Prevalence of IPV Victimization, Childhood Witness of Parental Violence, and Suicide

	Total		Male		Female		t-test
	n	%	N	%	n	%	
IPV Sexual (lifetime - total)	334	6.9	105	4.7	229	8.9	0.000***
IPV Sexual (lifetime - severe)	89	1.8	35	1.6	54	2.1	0.169
IPV Sexual (preceding year - total)	156	3.2	52	2.3	104	4.0	0.001***
IPV Sexual (preceding year - severe)	18	0.4	9	0.4	9	0.3	0.767
IPV Physical (lifetime - total)	470	9.6	205	9.1	265	10.1	0.214
IPV Physical (lifetime - severe)	191	3.9	71	3.1	120	4.6	0.010**
IPV Physical (preceding year – total)	220	4.5	104	4.6	116	4.4	0.775
IPV Physical (preceding year - severe)	68	1.4	29	1.3	39	1.5	0.540
IPV Psychological (lifetime - total)	2783	57.2	1278	56.8	1505	57.6	0.543
IPV Psychological (lifetime - severe)	2077	42.7	952	42.3	1125	43.1	0.576
IPV Psychological (preceding year - total)	1983	40.8	945	42.0	1038	39.8	0.115
IPV Psychological (preceding year - severe)	1468	30.2	694	30.8	774	29.6	0.369
Childhood witness of parental psychological aggression	773	15.6	361	15.6	412	15.5	0.888
Childhood witness of parental physical violence & injury	234	4.7	103	4.5	131	4.9	0.444
Suicidal ideation	486	9.9	184	8.2	302	11.5	0.000***

Q3: Statistically significant (** p < 0.01; *** p < 0.001)

Table 4 *Demographic Correlates Associated With Adult Sexual Victimization as Reported by Regression Analyses*

Characteristic	N	Adjusted OR (95% CI) Lifetime IPV (sexual)	Adjusted OR (95% CI) Preceding-yr IPV (sexual)	Adjusted OR (95% CI) ASV (by non-partner)
Phase 1				
Gender				
Female	2708	2.164*** (1.665, 2.812)	2.103*** (1.444, 3.062)	0.592 (0.282, 1.241)
Male	2341	1.000	1.000	1.000
Age		0.993 (0.982, 1.003)	0.971*** (0.955, 0.987)	0.975 (0.944, 1.008)
Education				
Secondary 3 or below	3149	0.862 (0.564, 1.318)	0.78 (0.439, 1.387)	0.698 (0.219, 2.23)
Secondary 4 - 7	1417	1.143 (0.746, 1.752)	1.091 (0.623, 1.911)	1.239 (0.405, 3.796)
Tertiary or above	482	1.000	1.000	1.000
Marital status				
Divorced/separated	169	1.122 (0.665, 1.893)	0.3 (0.069, 1.301)	--
Widow	332	1.819* (1.088, 3.04)	0.299 (0.071, 1.26)	2.921 (0.801, 10.649)
Married/cohabiting	4548	1.000	1.000	1.000
New arrival	231	1.096 (0.668, 1.799)	1.225 (0.639, 2.35)	4.151** (1.444, 11.932)
Unemployment	263	1.214 (0.738, 1.999)	1.096 (0.512, 2.348)	--
Receiving social security	367	1.452 (0.974, 2.165)	1.652 (0.906, 3.011)	2.218 (0.762, 6.454)
Indebtedness	255	2.447*** (1.653, 3.621)	2.292** (1.33, 3.95)	2.544 (0.939, 6.892)
Alcohol abuse	410	1.623* (1.09, 2.416)	2.302** (1.396, 3.795)	0.876 (0.257, 2.983)
Drug abuse	103	3.068*** (1.744, 5.396)	2.848** (1.416, 5.728)	3.704 (0.892, 15.382)
Phase 2				
Childhood sexual abuse (CSA)	43	1.826 (0.733, 4.545)	3.301* (1.301, 8.374)	--
IPV Physical (lifetime - total)	470	12.522*** (9.614, 16.308)	6.507*** (4.514, 9.379)	3.273** (1.486, 7.206)
IPV Physical (lifetime - severe)	191	23.374*** (16.487, 33.136)	6.906*** (4.327, 11.022)	5.156*** (2.031, 13.087)
IPV Physical (preceding year - total)	220	5.65*** (3.982, 8.017)	11.075*** (7.409, 16.556)	3.197* (1.222, 8.363)
IPV Physical (preceding year - severe)	68	9.15*** (5.257, 15.927)	19.461*** (10.862, 34.866)	5.925** (1.804, 19.456)
IPV Psychological (lifetime - total)	2783	7.749*** (5.219, 11.507)	7.135*** (4.01, 12.695)	10.574** (2.518, 44.41)

IPV Psychological (lifetime - severe)	2077	5.926*** (4.426, 7.933)	4.286*** (2.878, 6.384)	3.787** (1.689, 8.489)
IPV Psychological (preceding year - total)	1983	2.59*** (2.004, 3.348)	8.466*** (5.135, 13.957)	5.201*** (2.161, 12.52)
IPV Psychological (preceding year - severe)	1468	2.682*** (2.093, 3.435)	5.649*** (3.837, 8.318)	4.316*** (2.014, 9.25)
Childhood witness of parental psychological aggression	773	2.18*** (1.666, 2.851)	2.086*** (1.436, 3.032)	3.397*** (1.671, 6.905)
Childhood witness of parental physical violence & injury	234	4.184*** (2.92, 5.996)	3.146*** (1.937, 5.11)	1.811 (0.589, 5.563)
Suicidal ideation	486	2.032*** (1.485, 2.78)	2.012** (1.296, 3.124)	8.778*** (4.204, 18.329)
Depression	5047	1.662*** (1.27, 2.176)	1.509 (0.997, 2.284)	1.952 (0.99, 3.849)
Self-esteem	5001	0.453*** (0.285, 0.72)	0.336** (0.172, 0.658)	0.697 (0.176, 2.766)

Note. OR = odds ratio; CI = confidence interval.
Individual variables in Phase 2 were adjusted by variables in Phase 1
Statistically significant (*$p < 0.05$; ** $p < 0.01$; *** $p < 0.001$) ORs.