

The HKU Scholars Hub





| Title | Common correlates of suicidal ideation and physical assault among male and female university students in Hong Kong |
|-------------|--|
| Author(s) | Ko, LC; Tiwari, A; Leung, WC; Ho, HWY; Cerulli, C |
| Citation | Violence And Victims, 2007, v. 22 n. 3, p. 290-303 |
| Issued Date | 2007 |
| URL | http://hdl.handle.net/10722/82375 |
| Rights | Creative Commons: Attribution 3.0 Hong Kong License |

Violence and Victims, Volume 22, Number 3, 2007

Common Correlates of Suicidal Ideation and Physical Assault Among Male and Female University Students in Hong Kong

•

[AuQ1]

()

Ko Ling Chan, Agnes Tiwari, W. C. Leung, Hesta W. Y. Ho,

University of Hong Kong

Catherine Cerulli,

University of Rochester Medical Center, NY

This study examined prevalence and correlates of suicidal ideation and dating partner violence in a cohort of 651 university students in social sciences classes at three universities in Hong Kong. A standard questionnaire was completed within one class period to examine the rates of occurrence of physical assault perpetration and suicidal ideation. Separate rates are presented for male and female perpetrators and for severe and overall levels of violence. The differences between subjects having suicidal ideation are compared using *t* tests. Logistic regression is used to predict the presence or absence of physical assault in the preceding year of reporting and suicidal ideation based on the variables such as Personal Relationship Profile, age, relationship length, and socioeconomic status. Results showed that 55% of suicidal ideation. Logistic regression showed that physical assault shared a total of seven associated factors with suicidal ideation. Suicidal ideation seems to have no direct relation to physical and sexual assault, but they do share some common associated factors that are essential for the development of suicide prevention.

Keywords: suicide; dating violence; intimate partner violence; risk factor; Chinese; personality disorder

Intimate partner violence (IPV) and suicide are universal social problems that can be prevented by adopting the public health approach through recognizing their prevalence and correlates (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). In the United States, the lifetime prevalence of physical assault by an intimate partner was reported to be 22.1% for women, with 1.3% reporting violence during the year before the study (Tjaden & Thoennes, 2000). In Israel, 5.8% of women reported that they were the victims of at least one violent incidence during the previous 12 months (Eisikovits, Fishmann, & Mash, 2001). Among Asian ethnic groups, 67% of female respondents in Japan reported having

© 2007 Springer Publishing Company

290

()

experiences of physical, psychological, and/or sexual abuse (Weingourt, Maruyama, Sawada, & Yoshino, 2001), while in China, the lifetime and preceding-year prevalence of IPV was 43% and 26%, respectively (Xu et al., 2005).

()

Intimate partner violence among youth and adolescents is also prevalent. Approximately one in five female students have reported being physically abused by a dating partner (Silverman, Raj, Mucci, & Hathaway, 2001). A recent study of violence among university students (n = 8,666) in 16 countries revealed that the prevalence of physical assault by a dating partner in the previous 12 months ranged from 17% to 45% worldwide (Straus, 2004). The study showed a range of findings, with the incidence of physical assault at the university with the highest rate as much as 2.5 times higher than that at the university with the lowest rate. Overall, 9.4% of the students had severely assaulted a partner in the previous 12 months.

Research into suicide generally covers three main themes: completed suicide, parasuicide (attempted suicide), and suicidal ideation or behavior. Rates for completed suicide vary from country to country. In the United States, suicide is the eighth leading cause of death and a major cause of morbidity (Simon, Anderson, Thompson, Crosby, & Sacks, 2002). Rates between 2.5% and 4% have been reported in Australia, Canada, California, Italy, Spain, Sweden, and Greece (La Vecchia, Lucchini, & Levi, 1994). For the attempting suicide, 50% who reported both domestic violence and rape also reported attempting suicide in terms of victimization (Ackard & Neumark-Sztainer, 2002). A study on attempted suicide in West London reported that it is more common among Asian women to have attempted suicide compared to White women and Asian men (Bhugra, Desai, & Baldwin, 1999). In a sample of 2,614 Asian adolescents, the rate of suicidal ideation ranged from 10% to 20% (Robert & Chen, 1995). Mexican American youths appear to be at higher risk than Anglo-American youths, particularly for suicidal ideation.

The suicide rate in Hong Kong is alarming. Comparing suicide attempts in Hong Kong with those in Western countries, Chiu (1986) found that suicide attempts in Hong Kong in 1986 were significantly more likely to be precipitated by interpersonal conflicts and significantly less likely to be precipitated by economic stress. Ho, Hung, Lee, Chung, and Chung (1995) reviewed the Coroner's Court reports of consecutive population-based youth suicide cases (below age 25 years, n = 303) from 1986 to 1992 and found that Hong Kong had low male but high female youth suicide rates compared to other countries. Youth suicides in Hong Kong were characterized by a high prevalence of psychiatric disturbances and age-normative precipitants. Another study recently conducted in Hong Kong indicated that 28.4% of those aged 15 to 59 had experienced suicidal ideation in their lifetimes, 2.3% had made plans to attempt suicide in the past year, and 1.7% had attempted suicide in the past year. Suicide is the leading cause of death in Hong Kong, especially for youths aged 15 to 24 (Yip, Chan, Chen, & Lee, 2005).

NEXUS BETWEEN IPV AND SUICIDE

The nexus between attempted suicide or suicidal ideation and IPV has been investigated. At least 30% of violent people have a history of self-destructive behavior, while 20% of suicidal persons have a history of violence (Van Praag, Plutchik, & Apter, 1990). Individuals exposed to IPV are at considerable risk for suicide (Daniels, 2005), especially women victims (Fischbach & Herbert, 1997). Conner, Cerulli, and Caine (2002) found that

۲

()

()

Chan et al.

among partner-violent male respondents recruited in a domestic violence court, 45.5% and 12.9% reported a history of threatened suicide and suicide attempts, respectively. For both male and female adolescents, suicide attempts are associated with being a victim and a perpetrator of violence (Liang, Flisher, & Chalton, 2003).

()

Common risk factors of IPV and suicide include mental disorders, such as depression, schizophrenia, personality disorder, psychopathology, and paranoia (Walrath et al., 2001); alcohol and substance abuse (Stout, 1993); a history of domestic violence (Bryant & Range, 1997); poor economic conditions (Mitchell & Hodson, 1983); and severe gender inequality (Hickman, Jaycox, & Aronoff, 2004). Past studies have tended to focus on female victims of IPV. Battered women are four to five times more likely than other women to require psychiatric treatment and five times more likely to attempt suicide (Stark et al., 1981). Bohn and Holz (1996) suggest that it is quite common for sexual and/or physical abuse survivors to have problems of substance abuse, depression, and suicidality. The most common mental problems associated with IPV victimization

The perpetration of IPV and suicide may lead to an increased risk of homicide (Rosenbaum, 1990). Early prevention of IPV and suicide can possibly facilitate the prevention of homicide (Gutierrez & Lira, 2004). Although previous studies have revealed a possible connection between suicide and IPV, detailed knowledge of the link between male and female perpetrators of IPV and suicidal ideation, especially in a Chinese population, is lacking.

are posttraumatic stress disorder (Street & Arias, 2001; Vogel & Marshall, 2001) and

CONCEPTUAL FRAMEWORK

depression (Golding, 1999).

The purpose of the study is to provide data on the prevalence of physical assault against dating partners and suicidal ideation among both male and female university students in Hong Kong and to examine the interrelationship between IPV and suicidal ideation. The psychopathological approach suggests that violence is caused by a psychological abnormality, particularly features of personality disorder and traits (Ammerman & Hersen, 1990). Such approach has been criticized, however, because of the possible overrepresentation of psychopathology in clinical battering populations (Tolman & Bennett, 1990). The sampling of the present study allows for exploration of an ecological model that includes both individual and relationship factors (Krug et al., 2002). Individual and relationship factors are examined for their association with IPV as well as suicide ideation.

THE INTERNATIONAL DATING VIOLENCE STUDY

This article uses the data sample of Hong Kong in the International Dating Violence study to compare and contrast the risk factors of suicidal ideation and IPV. The International Dating Violence study was conducted by members of a research consortium, and Hong Kong was one of the sites of the study (Straus, 2004). One of the strengths of the study is that it applied well-validated instruments such as the Revised Conflict Tactics Scales (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) to measure IPV and the Personal and Relationships Profile (Straus, Hamby, Boney-McCoy, & Sugarman, 1999) to measure a wide range of etiological variables associated with partner violence. For the purpose of

3003016-03.indd 292

()

۲

this study, dating is defined as a dyadic relationship involving social interaction and joint activities with an explicit or implicit intention to continue the relationship (Straus, 2004).

()

METHODS

Sample

Descriptive statistics of the 651 participants are shown in Table 1. Male participants made up 29% and female participants 71% of the total sample. Most of the university students were sophomores and freshmen. All the participants had a current or past intimate relationship for at least a month. About 37% of participants had dated for at least 2 years or more. Seventy percent were living with their parents, and more than 80% had parents who were married.

Procedure

The data were obtained by administering questionnaires to students in social work and other social sciences classes at three local universities. The questionnaire package was completed within one class period. The data were gathered using procedures approved by the ethics approval board for protection of human subjects at the university. The participants were told that the questionnaire asked about their attitudes, beliefs, and experiences and that it included questions on sensitive issues, including sexual relationships. The purpose of the study and the students' right not to participate were explained orally as well as in printed form before administering the questionnaire. To respect the privacy and the voluntary nature of participation, the instructions emphasized that the participants were free to ignore any question they did not wish to answer. They were assured of anonymity and confidentiality. A debriefing form, providing names and telephone numbers of mental health and community resources, such as services for battered women, was given to each participant as they left.

Measures

()

Revised Conflict Tactics Scales. The Revised Conflict Tactics Scales (CTS2) developed by Straus et al. (1996) is widely used to measure the occurrence and severity of tactics for resolving conflicts between intimate partners, including physical assault, sexual coercion, psychological aggression, injury, and negotiation. The CTS2 has been translated into Chinese with a satisfactory reliability alpha ranging from .78 to .88 (Chan, 2004). In this study, the alpha of the CTS2 ranged from .78 to .98. The analyses used data from the physical assault scales.

Socioeconomic Status Scale. The socioeconomic status (SES) scale was created to measure socioeconomic status by computing the number of years of education completed by the student's father and mother and family income (Straus, 2004). The mean score on the SES scale was 8.3 (SD = 3.7). The alpha coefficient of reliability for the SES scale was 0.71.

Personal and Relationship Profile. The Personal and Relationship Profile (PRP), developed by Straus et al. (1999), is a self-report measure intended for clinical screening and research on family violence. The PRP's items are arranged in 21 subscales that are theoretically related to the etiology of IPV measuring individual and relationship factors. The definitions of the factors are shown in Table 2.

()

| Characteristics | Ν | Total % | Male % | Female % | χ^2 | df |
|-------------------------------|-----|------------|--------|-------------|----------|----|
| Year in school | 651 | | | | 1.88 | 3 |
| Freshman | | 30.0 | 28.3 | 30.7 | | |
| Sophomore | | 33.0 | 34.0 | 32.6 | | |
| Junior | | 19.2 | 17.3 | 20.0 | | |
| Senior | | 17.8 | 20.4 | 16.7 | | |
| Age | 651 | | | | | |
| Age 18 or under | | 1.4 | 1.1 | 1.5 | 24.24*** | 7 |
| 19-21 | | 62.5 | 57.6 | 64.6 | | |
| 22-24 | | 23.8 | 20.9 | 25.0 | | |
| 25-29 | | 9.1 | 16.2 | 6.1 | | |
| 30 or above | | 3.2 | 4.2 | 2.8 | | |
| Parents' marital status | 650 | | | | 7.47 | 5 |
| Married | | 84.9 | 87.4 | 83.9 | | |
| Separated or divorced | | 7.9 | 8.9 | 7.4 | | |
| Not married | | 0.6 | 0.0 | 0.9 | | |
| Dead | | 6.6 | 3.7 | 7.8 | | |
| Relationship status | 651 | | | | 7.26** | 1 |
| One month or more | | 68.4 | 60.7 | 71.5 | | |
| Previous | | 31.6 | 39.3 | 28.5 | | |
| Cohabitation status | 606 | | | | 18.27*** | 3 |
| With partner | | 2.8 | 4.1 | 2.3 | | |
| Own place | | 6.9 | 12.8 | 4.6 | | |
| Roommate, nonpartner | | 20.0 | 23.3 | 18.7 | | |
| Parents | | 70.3 | 59.9 | 74.4 | | |
| Relationship length | 638 | | | | 11.52** | 2 |
| Less than 2 years | | 63.3 | 68.6 | 61.1 | | |
| 2 years or above | | 36.7 | 31.4 | 38.9 | | |
| Was sex part of relationship? | | | | | 2.28 | 1 |
| Yes | 619 | 37.3 | 32.8 | 39.2 | | |

۲

TABLE 1. Demographic Characteristics

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

294

۲

۲

| Factors | Brief Description |
|-------------------------|--|
| Individual factors | |
| Antisocial personality | Personality features derived from the <i>Diagnostic and</i> <i>Statistical Manual of Mental Disorders</i> (4th ed.) (<i>DSM-IV</i>), such as irresponsibility, gender hostility, impulsivity, and poor social relationships |
| Borderline personality | Personality features derived from <i>DSM-IV</i> , such as instability, impulsivity, emotional lability, and poor social relationships |
| Criminal history | The extent to which the respondent has committed criminal acts |
| Depressive symptoms | Disturbances in mood, dysphoric cognitions, and somatic disturbances |
| Gender hostility | Hostility to women, hostility to men, negative beliefs, and negative emotions |
| Neglect history | Unfulfilled physical and emotional needs in family of origin |
| Posttraumatic stress | Experiencing and reexperiencing trauma; avoidance/arousal |
| Social integration | An individual's attachment to society and social norms |
| Substance abuse | Excessive use of alcohol or other mind-altering drugs |
| Stressful conditions | Stress or hassles experienced in daily living |
| Sexual abuse history | Abuse happened in adult, family child, or nonfamily child |
| Violence approval | The extent to which use of physical force is acceptable in a variety of interpersonal situations |
| Violent socialization | The extent of experiencing and witnessing violence and receiving pro-violence advice during childhood from family and nonfamily persons |
| Relationship factors | |
| Anger management | Recognizing signs of anger, self-talk, and behavioral self-soothing |
| Communication problems | The ability to express oneself verbally to one's current partner |
| Conflict | Areas of disagreement between the partners |
| Dominance | Dominance describes relationships that are hierarchical and in which the person with greater advantage uses that advantage to gain status, privilege, or control over his or her partner |
| Jealousy | Extreme concern about the possible sexual and social exclusiveness of the current partner |
| Negative attribution | Blame/negative intentions attributed to partner of respondent |
| Relationship commitment | The degree to which the respondent wishes and plans to work for the ongoing existence of the relationship |
| Relationship distress | Areas of dissatisfaction with the relationship, characterized by high conflict and few positive interactions |

۲

 TABLE 2. Definitions of Individual and Relationship Factors Measured by the

 Personal and Relationship Profile

۲

۲

Participants rate their agreement with each item on a scale of 1 ("strongly disagree") to 4 ("strongly agree"), and items are summed to create subscale scores. All the items of the PRP were translated and back-translated into Chinese. The reliability alphas of the 21 PRP subscales and the SES scale are shown in Table 3. About 81% of the total scales had an alpha coefficient of .60 or above. The mean alpha coefficient for the 21 scales was .70.

۲

Suicidal Ideation and Self-Harm. One item from the depression scale of the PRP was extracted to assess the dimension of suicidal ideation (SI; "I have thought about killing myself"). This created a four-response set ranging from 1 ("strongly disagree") to 4 ("strongly agree"). Self-harm is a subscale of the Borderline Personality Scale of the PRP. It consists of four items: "I'd do almost anything to keep people from leaving me," "I often get hurt by things that I do," "I've told others I will kill myself," and "I have had thoughts of cutting or burning myself."

| | Items | Total | Male | Female |
|-------------------------|-------|-------|------|--------|
| Individual factors: | | | | |
| Antisocial personality | 9 | 0.71 | 0.74 | 0.69 |
| Borderline personality | 9 | 0.73 | 0.73 | 0.73 |
| Criminal history | 8 | 0.82 | 0.82 | 0.81 |
| Depressive symptoms | 8 | 0.78 | 0.80 | 0.78 |
| Gender hostility | 10 | 0.70 | 0.71 | 0.70 |
| Neglect history | 8 | 0.80 | 0.77 | 0.81 |
| Posttraumatic stress | 8 | 0.71 | 0.73 | 0.70 |
| Social integration | 10 | 0.57 | 0.50 | 0.60 |
| Substance abuse | 8 | 0.83 | 0.85 | 0.79 |
| Stressful conditions | 9 | 0.64 | 0.68 | 0.61 |
| Sexual abuse history | 8 | 0.85 | 0.85 | 0.84 |
| Violence approval | 10 | 0.70 | 0.70 | 0.71 |
| Violent socialization | 8 | 0.77 | 0.75 | 0.77 |
| Relationship factors: | | | | |
| Anger management | 9 | 0.71 | 0.72 | 0.69 |
| Communication problems | 8 | 0.60 | 0.65 | 0.59 |
| Conflict | 9 | 0.70 | 0.74 | 0.68 |
| Dominance | 9 | 0.53 | 0.51 | 0.55 |
| Jealousy | 8 | 0.84 | 0.82 | 0.83 |
| Negative attribution | 4 | 0.45 | 0.44 | 0.46 |
| Relationship commitment | 6 | 0.56 | 0.53 | 0.55 |
| Relationship distress | 8 | 0.69 | 0.63 | 0.72 |
| Demographic factor: | | | | |
| SES | 3 | 0.71 | 0.75 | 0.69 |

TABLE 3. Reliability Alphas of Personal and Relationship Profile and Socioeconomic Status (SES)

296

۲

۲

Data Analysis

Descriptive analysis of the prevalence of physical assault and the demographic variables was conducted. The *t* test was carried out to detect any gender difference in terms of physical assault, SI, and self-harm and to compare the SI and non-SI groups in terms of physical assault, self-harm, and depression. Correlation analysis was performed to test the association of the PRP variables with physical assault and SI. Logistic regression was used to predict the presence or absence of physical assault in the preceding year of reporting and SI based on the variables such as PRP, age, relationship length, and SES. Logistic regression is an appropriate technique when the dependent variables. Except for the PRP scales, the model included the following variables: age of the respondents, relationship length, and SES.

۲

RESULTS

Prevalence

۲

Table 4 shows the lifetime and preceding-year prevalence of physical assault, SI, and self-harm. The lifetime and preceding-year prevalence of physical assault were 57% and 46%, respectively. It is relatively high when compared to other universities investigated in the International Dating Violence study (Straus, 2004). The rate of SI among the participants was 41%, which is similar to the rate found by Conner and colleagues (2002).

Tables 5 and 6 show that 55% of suicidal persons had a history of violence and that 39% of violent people had a history of SI. However, the *t* test revealed that these rates were not significantly different from those of the nonassault and non-SI participants. Only the group with SI reported significantly higher rates of self-harm and depression.

| | Total | Male | Female | p Value |
|----------------------------------|-------|------|--------|---------|
| Physical assault: | | | | |
| lifetime prevalence/severe | 27.0 | 16.2 | 30.4 | 0.00* |
| Physical assault: | | | | |
| lifetime prevalence/overall | 56.7 | 42.5 | 61.4 | 0.00* |
| Physical assault: | | | | |
| preceding-year prevalence/severe | 21.7 | 13.5 | 24.3 | 0.01* |
| Physical assault: | | | | |
| preceding-year prevalence/ | 46.1 | 36.2 | 49.3 | 0.01* |
| overall | | | | |
| Suicidal ideation | 41.2 | 37.3 | 42.9 | 0.20 |
| Self-harm (score) | 8.1 | 8.0 | 8.2 | 0.37 |

()

| TABLE 4. Prevalence of Physical Assault Perpetration, Suicidal Ideation, and |
|--|
| Self-Harm in Hong Kong |

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

297

TABLE 5. Prevalence of Physical Assault Perpetration, Self-Harm, and Depression Among Male and Female Subjects Having Suicidal Ideation (SI)

| | | | Total | | | Male | | | Female | |
|--|--------------|-------------|---------------|------|-------------|---------------|------|-------------|---------------|------|
| | | SI (%) | Non-SI (%) | Test | SI (%) | Non-SI (%) | Test | SI (%) | Non-SI (%) | Test |
| Physical assault: lifetime prevalence/severe | | 26.2 | 28.5 | 0.59 | 16.3 | 16.4 | 0.99 | 28.9 | 33.0 | .43 |
| Physical assault: lifetime prevalence/overall | | 54.6 | 59.2 | 0.30 | 37.8 | 45.7 | 0.39 | 59.3 | 64.6 | .30 |
| Physical assault: preceding-year prevalence/severe | | 20.0 | 23.1 | 0.37 | 16.3 | 11.9 | 0.52 | 21.1 | 27.9 | 0.15 |
| Physical assault: preceding-year prevalence/overall | | 43.5 | 49.1 | 0.22 | 33.3 | 38.3 | 0.58 | 46.3 | 53.4 | 0.18 |
| Self-harm Depression | Mean Mean | 9.4 19.0 | 7.3 15.5 | 0.00 | 9.2 19.3 | 7.3 15.8 | 0.00 | 9.5 19.0 | 7.2 15.3 | 0.00 |

| | Ass | ault: Ov | erall | As | Assault: Male | | | Assault: Female | | |
|-------------------|------------|-----------|-------|------------|---------------|------|------------|-----------------|------|--|
| | Yes (%) | No (%) | Test | Yes (%) | No (%) | Test | Yes (%) | No (%) | Test | |
| Suicidal ideation | 39.0 | 44.5 | 0.21 | 32.6 | 37.5 | 0.58 | 40.5 | 47.5 | 0.18 | |

 TABLE 6. Prevalence of Suicidal Ideation Among Male and Female Subjects

 Perpetrating Physical Assault in the Preceding Year

()

Logistic Regression

Table 7 presents the univariate logistic regression results of the socioeconomic, individual, and relationship risk factors. The findings revealed that there were seven risk factors having significantly higher odds of physical assault and SI, namely, antisocial personality, borderline personality, criminal history, gender hostility, posttraumatic stress symptoms, social integration, and age. Neglect history and stressful conditions were common factors of male perpetration of assault and SI, whereas sexual abuse history was common to female perpetration of assault and SI. Factors such as anger management, communication problem, domination, jealousy, negative attribution, violence approval, and relationship length were unique to assault, whereas depressive symptoms, relationship commitment, and violent socialization were found to be significant factors to SI only. Several factors were not significant to assault and SI, including conflict, relationship distress, substance abuse, and SES.

DISCUSSION

()

This is one of the few studies to report a number of risk factors that are conceptually and empirically associated with IPV, as measured by the PRP, particularly in Chinese society. The reliabilities of the CTS2 and PRP were very high in this study, which provides a profile of risk factors associated with dating violence and suicidal ideation among male and female university students. The findings show that 46% and 41% of university students had a history of physical assault and suicidal ideation, respectively. The nexus between dating physical assault and suicidal ideation was such that 55% of suicidal persons had a history of violence, whereas 39% of violent people had a history of SI. Interestingly, the difference between the SI and non-SI groups in terms of physical assault was not significant. This was also true for the assault and nonassault groups when comparing the rates of suicidal ideation. This reveals that the association between dating physical violence and suicidal ideation may not be significant, as predicted by other studies (Daniels, 2005; Liang et al., 2003). It is probably because the majority of the respondents involved in this study were using minor levels of physical violence. They were less likely to display pathological symptoms that were associated with suicidal ideation. Another methodological limitation is the definition of suicidal ideation. In this study, the measure of SI relied on one item derived from the depression scale. This item did not differentiate whether the subject simply had a distant history of suicidal ideation or a more recent or ongoing episode of suicidal ideation.

Despite the limitations of the measurement of SI, this study does provide a comprehensive profile of risk factors for the identification of common correlates between dating ()

| | Physica | l Assault | Suicidal | | |
|----------------------------------|--------------------------------|------------------|--------------------|----------------------|--|
| PRP | Crude OR Total ^a | Crude OR Male | Crude OR Female | Ideation Crude OR | |
| Individual factors: | | | | | |
| Antisocial personality | 1.12* | 1.16* | 1.11* | 1.12** | |
| Borderline personality | 1.09* | 1.10 | 1.08* | 1.28** | |
| Criminal history | 1.06* | 1.13* | 1.05* | 1.09** | |
| Depressive symptoms | 1.03 | 1.05 | 1.02 | 1.46** | |
| Gender hostility | 1.07* | 1.11 | 1.06 | 1.07* | |
| Neglect history | 1.03 | 1.12* | 1.00 | 1.06** | |
| Posttraumatic stress symptoms | 1.10* | 1.16* | 1.08* | 1.18** | |
| Social integration | 0.91* | 0.83* | 0.93* | 0.93** | |
| Substance abuse | 0.94 | 0.93 | 0.97 | 1.06 | |
| Stressful conditions | 1.05 | 1.13* | 1.02 | 1.16** | |
| Sexual abuse history | 1.02 | 0.95 | 0.92* | 1.07** | |
| Violence approval | 1.07* | 1.11 | 1.07* | 1.04 | |
| Violent socialization | 1.04 | 1.07 | 1.04 | 1.10** | |
| Relationship factors: | | | | | |
| Anger management | 0.86* | 0.91 | 0.86* | 0.98 | |
| Communication problem | 1.14* | 1.20* | 1.11* | 1.05 | |
| Conflict | 1.07 | 1.12 | 1.05 | 1.03 | |
| Dominance | 1.15 | 1.14 | 1.15* | 1.01 | |
| Jealousy | 1.10* | 1.04 | 1.12* | 1.03 | |
| Negative attribution | 1.33* | 1.82* | 1.23* | 1.04 | |
| Relationship commitment | 0.94 | 1.00 | 0.94 | 0.89** | |
| Relationship distress | 1.05 | 1.06 | 1.05 | 1.05 | |
| Demographic factors: | | | | | |
| Age | 0.85* | 0.93 | 0.84* | 1.18** | |
| Relationship length | 1.15* | 1.03 | 1.20* | 1.04 | |
| SES | 1.01 | 1.00 | 1.01 | 1.01 | |

 TABLE 7. Univariate Regression Analyses on Personal and Relationship Profile

 (PRP) Scales, Age, Relationship Length, and Socioeconomic Status (SES) With

 Male and Female Perpetration of Physical Assault and Suicidal Ideation

۲

 $^{a}OR = odds ratio.$

physical violence and SI as well as some gender-specific risk factors that are essential elements for the development of prevention and intervention programs. Knowing the common correlates of violence and suicide, practitioners who deal with either violence or suicide cases may need to be aware of the possible coexistence of the two problems. Screening for mental health problems, such as posttraumatic stress symptoms as well as antisocial and borderline personality disorders, social integration problems, criminal history, and gender hostility, are important, as these factors may increase the risk of SI and physical violence.

۲

۲

Risk management is necessary to reduce the harm of SI and physical violence and thus reduce the possibility of committing homicide (Rosenbaum, 1990).

Practitioners should make appropriate clinical assessments of the symptoms and make immediate referrals to psychiatric services for clients who are suspected of having antisocial or borderline personality disorders as well as posttraumatic symptoms. Close and frequent monitoring through phone calls and home visits can be used for those who have a past criminal history and history of gender hostility. Peer and social support groups can be provided to perpetrators who are socially isolated. Since age, neglect history, and stressful conditions are common factors of male perpetration of assault and suicidal ideation, practitioners may need to pay more attention to detect any stressful life events and neglect history in males. Therapeutic sessions or counseling services should be provided to minimize the impact of the specific life event(s) and resolve the bad memories from the past. Practitioners should also carefully manage female clients with sexual abuse history. Monitoring and therapeutic sessions are recommended not only to safeguard or reduce the possibility of their committing suicide or further perpetration but also to resolve the traumatic memories from the past. According to Monahan (1993), effective interventions in managing the risk of violence not only lower the risk of recidivism but also warn and educate potential victims. Further studies are essential to design specific prevention and intervention programs for those with a tendency for self-harm or depression with a history of IPV. This may help decrease the risk of suicide and IPV. Thus, the available data suggest that a comprehensive model of violence prevention might effectively incorporate and provide suicide prevention. Replication of this work across additional cultures would help determine what aspects of these findings may be universally generalized and which may be specific to the Hong Kong/Chinese culture.

[AuQ3]

()

REFERENCES

- Ammerman, R. T., & Hersen, M. (Eds.). (1990). *Treatment of family violence: A sourcebook*. New York: Wiley.
- Ackard, D. M., & Neumark-Sztainer, D. (2002). Date violence and date rape among adolescents: Association with disordered eating behaviors and psychological health. *Child Abuse and Neglect*, 26, 455–473.
- Bhugra, D., Desai, M., & Baldwin, D. S. (1999). Attempted suicide in West London: Rates across ethnic communities. *Psychological Medicine*, 29, 1125–1130.
- Bohn, D. K., & Holz, K. A. (1996). Sequelae of abuse: Health affects of childhood sexual abuse, domestic battering and rape. *Journal of Nurse Midwifery*, 41, 442–456.
- Bryant, S. L., & Range, L. M. (1997). Type and severity of child abuse and college students' lifetime suicidality. *Child Abuse and Neglect*, 21, 1169–1176.
- Chan, K. L. (2004) Correlates of wife assault in Hong Kong Chinese families. *Violence and Victims*, 19, 189–201.
- Chiu, L. P. (1986). Attempted suicide in Hong Kong. Acta Psychiatrica Scandinavica, 79, 425–430.
- Conner, K. R., Cerulli, C., & Caine, E. D. (2002). Threatened and attempted suicide by partner-violent male participants petitioned to family violence court. *Violence and Victims*, *17*, 115–125.
- Daniels, K. (2005). Violence and depression: A deadly comorbidity. Journal of Psychological Nursing, 43, 45–51.
- Eisikovits, Z., Fishmann, G., & Mash, G. (2001). A comprehensive survey and characteristics of violence against women, children, and youth at risk. Unpublished manuscript, University of Haifa, Minerva Center for the Study of Youth (Hebrew), Israel.

()

- Fischbach, R. L., & Herbert, B. (1997). Domestic violence and mental health: Correlates and conundrums within and across cultures. *Social Science and Medicine*, *45*, 1161–1176.
- Golding, J. (1999). Intimate partner violence as a risk factor for mental disorder: A meta-analysis. *Journal of Family Violence, 14*, 99–132.
- Gutierrez, M. A. C., & Lira, L. R. (2004). Violence: A thematic review within the research framework of the National Institute of Psychiatry. *Salud Mental*, 27, 21–30.
- Hickman, L. J., Jaycox, L. H., & Aronoff, J. (2004). Dating violence among adolescents: Prevalence, gender distribution, and prevention program effectiveness. *Trauma, Violence, and Abuse, 5*, 123–142.
- Ho, T. P., Hung, S. F., Lee, C. C., Chung, K. F., & Chung, S. Y. (1995). Characteristics of youth suicide in Hong Kong. Social Psychiatry and Psychiatric Epidemiology, 30, 107–112.
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (Eds.). (2002). World report on violence and health. Geneva: World Health Organization.
- La Vecchia, C., Lucchini, F., & Levi, F. (1994). World-wide trends in suicide mortality, 1955–89. *Acta Psychiatrica Scandinavica*, 90, 53–64.
- Liang, H., Flisher, A. J., & Chalton, D. O. (2003). Violence and substance use in adolescents with increasing severity of suicidal behavior. *Archives of Suicide Research*, *7*, 29–40.
- Mitchell, R. E., & Hodson, C. A. (1983). Coping with domestic violence: Social support and psychological health among battered women. *American Journal of Community Psychology*, 11, 629–654.
- Robert, R. E., & Chen, Y. W. (1995). Depressive symptoms and suicidal ideation among Mexican-origin and Anglo adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 81–90.
- Rosenbaum, M. (1990). The role of depression in couples involved in homicide-suicide and homicide. American Journal of Psychiatry, 147, 1036–1039.
- Silverman, J. G., Raj, A., Mucci, L. A., & Hathaway, J. E. (2001). Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *Journal of the American Medical Association*, 286, 572–579.
- Simon, T. R., Anderson, M., Thompson, M. P., Crosby, A., & Sacks, J. J. (2002). Assault victimization and suicidal ideation or behaviour within a national sample of U.S. adults. *Suicide and Life-Threatening Behaviour*, 32, 42–50.
- Stark, E., Flitcraft, A., Zuckerman, B., Grey, A., Robinson, J., & Frazier, W. (1981). Wife abuse in the medical setting: An introduction for health personnel (Monograph 7). Washington, DC: Office of Domestic Violence.
- Stout, K. D. (1993). Intimate femicide: A study of men who have killed their mates. *Journal of Offender Rehabilitation*, 9, 81–94.
- Straus, M. A. (2004). Prevalence of violence against partners by male and female university students worldwide. *Violence Against Women*, 10, 790–811.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283–316.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1999). The personal and relationships profile (PRP). Unpublished manuscript.
- Street, A., & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women: Examining the roles of shame and guilt. *Violence and Victims*, 16, 65–78.
- Tjaden, P., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence*. Washington, DC: National Institute of Justice.
- Tolman, R. M., & Bennett, L. W. (1990). A review of quantitative research on men who batter. *Journal of Interpersonal Violence*, *5*, 87–118.
- Van Praag, H. M., Plutchik, R., & Apter, A. (1990). Violence and suicidality: Perspective in clinical and psychobiological research. New York: Brunner/Mazel.

()

()

Vogel, L., & Marshall, L. (2001). PTSD symptoms and partner abuse: Low income women at risk. *Journal of Traumatic Stress*, 14, 569–584.

۲

- Walrath, C. M., Mandekk, D. S., Liao, Q., Holden, E.W., De Carolis, G., Santiago, R. L., et al. (2001). Suicide attempts in the comprehensive community mental health services for children and their families program. *Journal of the American of Child and Adolescent Psychiatry*, 40, 1197–1205.
- Weingourt, R., Maruyama, T., Sawada, I., & Yoshino, J. (2001). Domestic violence and women's mental health in Japan. *International Nursing Review*, 48, 102–108.
- Xu, X., Zhu, F., O'Campo, P., Koenig, M. A., Mock, V., & Campbell, J. (2005). Prevalence of and risk factors for intimate partner violence in China. *American Journal of Public Health*, 95, 78–85.
- Yip, P. S. F., Chan, C. L. W., Chen, E. Y. H., & Lee, D. T. S. (2005). Suicidality among the general population and women in Hong Kong. In *Research findings into suicide and its prevention* (pp. 75–167). Hong Kong: Hong Kong Jockey Club Centre for Suicide Research and Prevention, University of Hong Kong.

Correspondence regarding this article should be directed to Ko Ling Chan, PhD, Department of Social Work and Social Administration, University of Hong Kong, Pokfulam, Hong Kong. E-mail: eklchan@hkucc.hku.hk.

303

۲

()

[AuQ1] Please provide any academic degrees for the authors.

[AuQ2] In Mitchell & Hodson (1983), I have changed Michell to Mitchell, per the references. OK?

۲

[AuQ3] Please add Monahan to the References.

[AuQ4] Yip et al. 2005 reference: Please supply editor names.





۲

()