

Canada: Alcohol and Partner Physical Aggression in the 10 Provinces

—*Kathryn Graham and Sharon Bernards*

Introduction

The first major research initiative explicitly focusing on intimate partner violence in Canada was the 1993 Violence against Women (VAW) Survey. This study found that 3% of those who had ever been married or were living in a common-law relationship reported violence by a male partner or ex-partner in the year before the survey (Johnson and Sacco, 1995) and that an additional 2% of Canadian women aged 18 and older reported having been the victim of threats of physical or sexual aggression by a male date or boyfriend. More recently, the 1999 and 2004 General Social Surveys (GSS) of Canadian residents aged 15 or older (Bunge and Locke, 2000; AuCoin, 2005) found similar past-year rates of physical or sexual assault by a current or former partner for women who were married, living in a common-law relationship, or had had contact with a partner during the previous five years (3% in 1999 and 2% in 2004); however, the percent reporting partner violence over the previous five years had decreased from 12% in 1993 to 8% in 1999 and 7% in 2004 (Johnson, 2006). About 2% of male GSS respondents reported physical aggression by a partner in the year prior to the surveys, while 7% in 1999 and 6% in 2004 reported violence by a partner during the past 5 years. In general, partner violence (Johnson, 2006), including spousal homicides against women (Wilson, Johnson, and Daly, 1995), has been found to decrease with age.

Results from the 2004 GSS indicate that females were more likely than males to report severe acts of aggression (receiving threats of violence, being beaten or choked, or having a gun or knife used against them) and ongoing incidents of violence by their partner (Mihorean, 2005). In addition, women were three times more likely than men to have suffered physical injuries and five times more likely to report fearing for their lives.

Women are also more likely than men to be killed by an intimate partner. The rate of spousal homicides against women has been about four to five times higher than the rate of spousal homicides against men, with 2,178 women and 638 men killed by a spouse between 1975 and 2004 (Johnson, 2006); in addition, women were more likely than men to kill in self-defense (Johnson, 2006).

Women in 2004 also were more likely than men to have reported using the services of community agencies (e.g., counselors, crisis lines, shelters), to have taken time off from paid or unpaid work as a direct result of partner violence, to have spent time in the hospital, and to have sought police protection from a spouse (Mihorean, 2005). In 2000, women accounted for 85% of all victims of spousal violence reported to a sample of police agencies in Canada (Trainor, 2002).

The Role of Alcohol

Intimate partner aggression in Canada has been found to be related to the drinking pattern of the offender, with more frequent consumption of five or more drinks per occasion (Bunge 2000; Johnson, 2000; Brownridge, 2002; Mihorean, 2005) associated with increased odds of being violent toward a female partner. In addition, a substantial proportion of violence against women occurred when the male partner had been drinking. About one-half of the respondents to the 1993 VAW survey who had ever been assaulted by their husbands or ex-husbands reported that the husband was usually drinking at the time of the violence (Rodgers, 1994). Of the incidents of violence by a partner reported to have occurred during the five years prior to the 2004 GSS, 44% of female victims and 24% of male victims reported that their partner had been drinking at the time (Mihorean, 2005).

Data from the 1999 GSS also indicated that alcohol use at the time of the incident was associated with more severe violence, including higher risk of injury and associated fear (Desjardins and Hotton, 2004). In incidents of spousal homicide between 1979 and 1998 (394 committed by women and 1,338 committed by men), alcohol or both alcohol and drugs were known to have been consumed by 59% of accused wives and 30% of accused husbands (Locke, 2000).

The Response of the Criminal Justice System

In 1996, the *Toronto Star* published a series of news articles on the outcomes of charges of spousal abuse which revealed major weaknesses in the response by the legal system. For eight months, the newspaper staff tracked 133 cases of spousal abuse that appeared before the courts in metropolitan Toronto during one week in July of 1995. The victims included 127 women and 6 men with almost all accused offenders being male. A third of the cases occurred after the relationship had ended and usually involved stalking by the offender. In addition, 32% of those charged during the week under study were already facing charges from a previous domestic assault incident. The newspaper noted that alcohol and drugs were involved in over half of the cases.

The *Star's* 9 March 1996 edition (p.A1-A4) reported the following highlights of the criminal justice process:

- While 60% of cases resulted in conviction, in most cases the men pled guilty to a lesser crime and received no jail time.
- Thirty-seven percent of the cases were not prosecuted because the victim failed to show up in court or recanted.
- In cases where the victim recanted her testimony, the court dropped the charges rather than use other forms of evidence, such as injury photographs, taped emergency calls, or statements from other witnesses.
- Eighty-five percent of offenders were released on bail, and almost half violated bail conditions by harassing, stalking, or moving back in with victims;
- After 8 months, 25% of cases were still awaiting trial;
- At 12 months following the original case, 35 of the 133 had committed new offenses; 85% of these occurred with the same victim (3 November 1996, p.B1).

The newspaper further indicated that many victims were intimidated by the partner and afraid to testify, while others did not want the offender to be incarcerated because he was the family's primary wage earner. Probably at least in part as a result of the exposé by the *Toronto Star*, special courts were set up in Ontario to deal specifically with domestic violence cases, based on the example of a similar court established in Winnipeg, Manitoba, in 1990. These courts now exist in other provinces and are structured to provide better support to victims and a greater focus on early intervention and prevention (for further information, see chapter 5 in Johnson and AuCoin, 2003); however, to date, there has been no rigorous evaluation of their effectiveness.

As in other countries, the criminal justice system in Canada has struggled to deal effectively with violence between intimate partners (see Johnson, 2007). Despite policies across Canada for the mandatory arrest of perpetrators of intimate partner violence, statistics from the 2004 GSS indicated that the police used their discretion in dealing with domestic violence cases. According to victim reports, 62% of police responding to domestic violence calls gave the abuser a warning, 44% removed the abuser from the home, and only about one-third made an arrest (Mihorean 2005). In 2002, violence involving spouses resulted in a prison sentence less often than violence involving non-spouses (19% versus 29%).

Other Programs for Partner Aggression

In terms of other programs and services addressing intimate partner aggression in Canada, the number of shelters for women has risen dramatically over the past 30 years from 18 in 1975 to 543 in 2004, as have treatment programs for abusive men (Johnson, 2006). Transition houses and shelters for abused women, services and programs for abused men, and treatment programs for abusive men are provided by government, police, or community organizations in all provinces and territories, including in large and small cities. In addition, 24-hour telephone helplines for victims are provided in many jurisdictions throughout the country. However, the majority of victims tend to turn to family (67% of women, 44% of men) or friends (63% of women, 41% of men) for assistance following partner aggression (Mihorean, 2005).

Methods

Survey and Sample

The GENACIS Canada survey included a representative sample of 14,063 Canadian residents (6,009 men and 8,054 women) aged 18 to 76 years from all 10 provinces. The survey was conducted between January 2004 and March 2005 as part of the GENACIS international collaboration (Gender, Alcohol, and Culture: An International Study). A random sample was selected using a two-stage sampling design: (1) households were selected using random digit dialing (RDD) of residential telephone numbers; and (2) within a household, the adult whose birthday most closely followed the interview date was selected as the survey respondent. Interviews were conducted using computer-assisted telephone interviewing (CATI). The response rate was 52.8% of all estimated eligible households. However, most refusals were made at the time of the initial household contact, and the participation rate among contacted eligible respondents was 85.4%. Weights were applied to adjust for under-sampling of persons in multi-adult households and slight over-sampling of smaller provinces.

General characteristics of male and female participants in the survey are shown in Table 1. Female respondents were overrepresented compared to the proportions of men and women in Canada based on 2006 national census data (50.2% women, 49.8% men aged 15–79). More than 80% of men and almost 75% of women in the sample reported drinking alcohol in the past 12 months. Men drank more frequently and in larger quantities per occasion than women, and a larger percentage of men (67.2%) than women (36.3%) drank heavily (five or more drinks) on at least one occasion during the past year.

TABLE 1. Age, marital status, employment status, and drinking pattern in the 12 months preceding the survey, for male and female respondents, by sex, GENACIS survey, Canada, 2004–2005.

	Males (weighted N=5,991)		Females (weighted N=8,072)	
	Number ^a	Percent or mean	Number ^a	Percent or mean
Age		44.4 years		45.6 years
18–24 years	609	10.3%	698	8.9%
25–34 years	1,102	18.6%	1,315	16.7%
35–44 years	1,341	22.6%	1,807	22.9%
45–54 years	1,293	21.8%	1,776	22.5%
55–64 years	938	15.8%	1,286	16.3%
65–76 years	641	10.8%	1,006	12.8%
Marital status				
Married	2,925	48.9%	3,857	48.0%
Cohabiting/Living with partner	750	12.6%	970	12.1%
Divorced or separated	487	9.8%	1,101	13.7%
Never married	1,588	26.6%	1,549	19.3%
Widowed	126	2.1%	553	6.9%
Employment status				
In the labor force	4,334	72.7%	4,892	60.9%
Caring for family	18	0.3%	543	6.8%
Unemployed	240	4.0%	445	5.5%
Long-term illness or disability	172	2.9%	249	3.1%
Student	353	5.9%	497	6.2%
Retired	843	14.1%	1,410	17.5%
Drinking pattern (past 12 months)				
Drank any alcohol during past 12 months	4,890	81.7%	6,023	74.6%
Average number of drinking days (drinkers only)		103.5 days		67.0 days
Average number of drinks per occasion (drinkers only)		3.2 drinks		2.1 drinks
Average annual volume (drinkers only)		431.6 drinks		182.6 drinks
Drank five or more drinks on at least one occasion (drinkers only)	3,050	63.2%	2,167	36.3%

^a Note that total numbers within each category vary due to missing responses.

Measures that Differed from the Core Questions

The sex of the respondent was determined by the interviewer at the beginning of the interview, and the interviewer was prompted to confirm this judgment later in the interview. Responses to the questions regarding the most severe physical act that was done by and toward a partner were open-ended, and interviewers were not explicitly instructed to either exclude or include sexual aggression. When the response fit into one of the preset categories provided to the interviewer, the response was coded by the interviewer using this option; otherwise, the interviewer recorded the response verbatim, and these open-ended responses were subsequently coded according to the guidelines described in the chapter “Common Survey Method and Analysis Conducted for Each Country Chapter”. Respondents who had same-sex partners were excluded from these analyses. In addition to victims being asked whether they sought medical attention after the incident, respondents who indicated they had been aggressive toward a partner were also asked if *their partner* sought medical attention after the incident. Whether the respondent consumed five or more drinks on any occasion in the past year was based on the item regarding how often the respondent drank five or more drinks, as described in the aforementioned chapter on methods.

Results

As shown in Figure 1, men were significantly more likely than women to report aggression by an opposite sex partner in the previous two years (7.2% vs. 5.3%, $p < .001$), and, conversely, women were more likely than men to report being physically aggressive toward a partner (5.7% vs. 3.4%, $p < .001$). For both men and women, the proportion that reported having been the victim of physical aggression was higher than the proportion of the opposite sex who reported being the aggressor (7.2% of men reported being the victim, while 5.7% of women reported being the aggressor, $p = .002$; 5.3% of women reported being the victim, while 3.4% of men reported being the aggressor, $p < .001$). Of those who reported any partner physical aggression, a similar percentage of men and women reported being both a victim and an aggressor (27.6% of men, 25.4% of women). However, a larger percentage of men than women reported being a victim only (60.1% versus 36.5%), while a larger proportion of women than men reported only aggression toward a partner (38.1% versus 12.3%).

The average age of female and male victims was 35.6 years and 34.9 years, respectively. Female aggressors were 35.7 years on average, and male aggressors were 33.2 years. As shown in Figure 2, aggression tended to be most prevalent among younger adults and to decrease with age.

As shown in Figure 3, for all groups, the lowest rate of partner aggression was reported by those who were currently married, and the difference between being married versus all other marital status groups was significant ($p < .001$) for female and male victims, and being married versus cohabiting and never having been married for female and male aggressors. It is notable that victimization was especially high for respondents who were divorced/separated, especially for female respondents, while this pattern was less apparent for aggressors. In fact, 9.1% of divorced/separated female respondents reported having been the victim of partner aggression, while only 3.7% of divorced/separated male respondents reported being aggressive toward a female partner.

FIGURE 1. Percent of respondents who reported having been a victim or aggressor, by sex, GENACIS survey, Canada, 2004–2005.

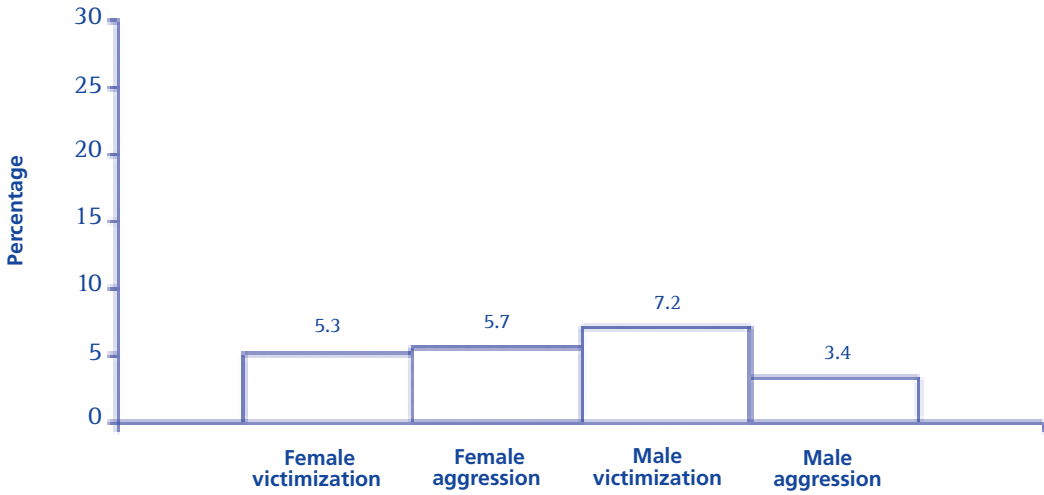


FIGURE 2. Percent of respondents who reported having been a victim or aggressor, by age group and sex, GENACIS survey, Canada, 2004–2005.

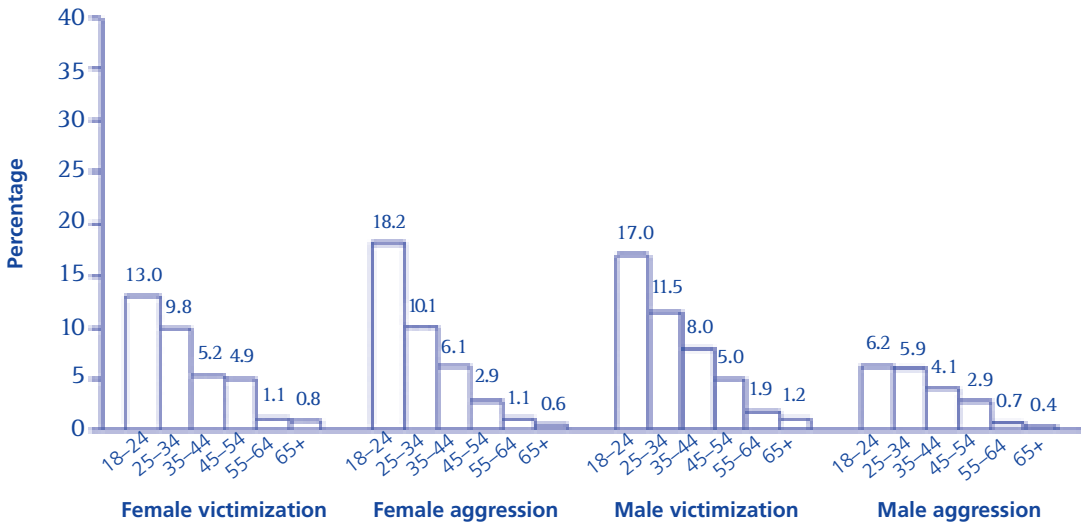


FIGURE 3. Percent of respondents who reported having been a victim or aggressor, by marital status and sex, GENACIS survey, Canada, 2004–2005.

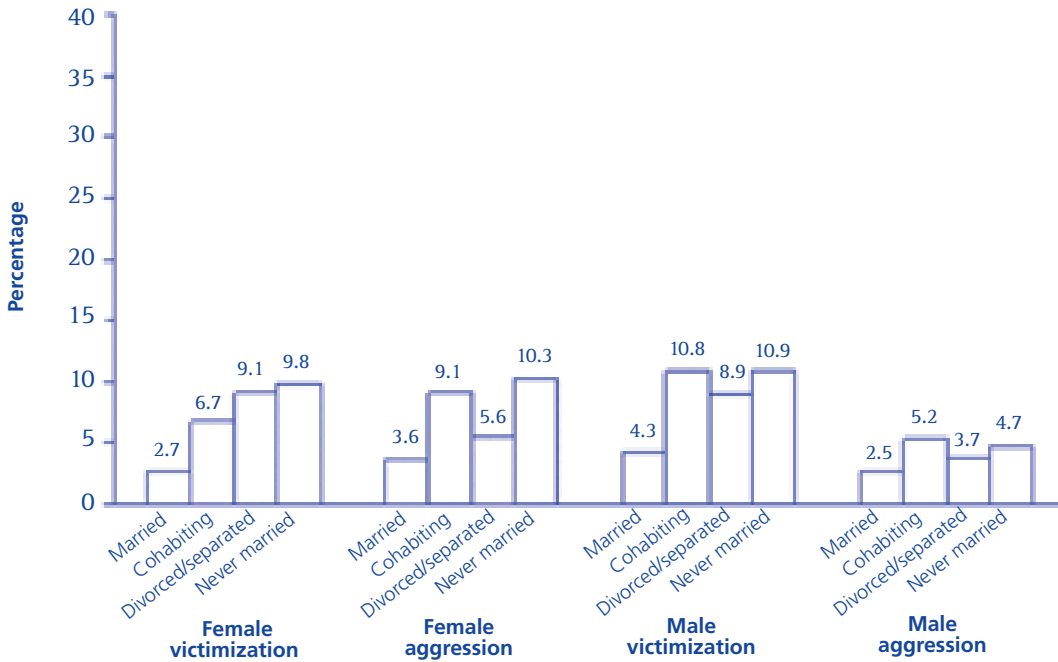


Figure 4 shows the type of aggressive act done to and by respondents. These graphs are set up to visually compare reports of aggression toward females (i.e., as reported by female victims and male aggressors) versus reports of aggression toward males (i.e., as reported by male victims and female aggressors). As is evident in this figure, male victims were significantly more likely than female victims to report being slapped, while female victims were more likely than male victims to report being pushed and grabbed ($p < .01$). Female victims also were more likely than male victims to report being beaten and punched, but this difference did not meet the criterion for statistical significance of $p < .01$.

Among respondents who reported being aggressive toward a partner, male aggressors were more likely than female aggressors to report pushing and grabbing, while females were more likely to report slapping and throwing something at the partner ($p < .01$). Female aggressors were also more likely than male aggressors to report punching ($p < .01$).

In terms of differences in whether the act was reported by a victim or aggressor, male aggressors were less likely than female victims to report punching and beating up, and female aggressors were less likely than male victims to report punching, but none of these differences was significant.

FIGURE 4. Type of aggressive act against females as reported by female victims and male aggressors, and against males as reported by male victims and female aggressors, GENACIS survey, Canada, 2004–2005.

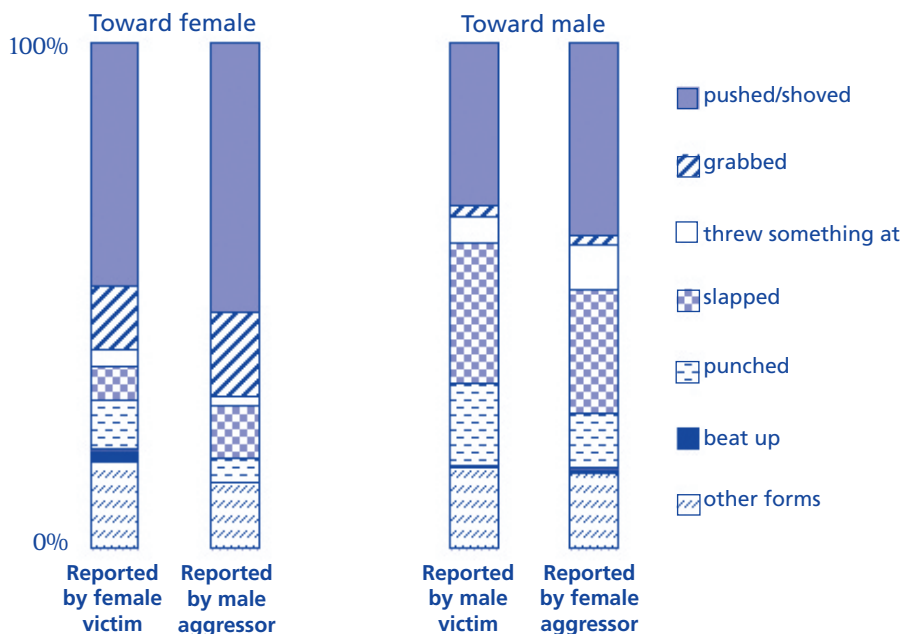
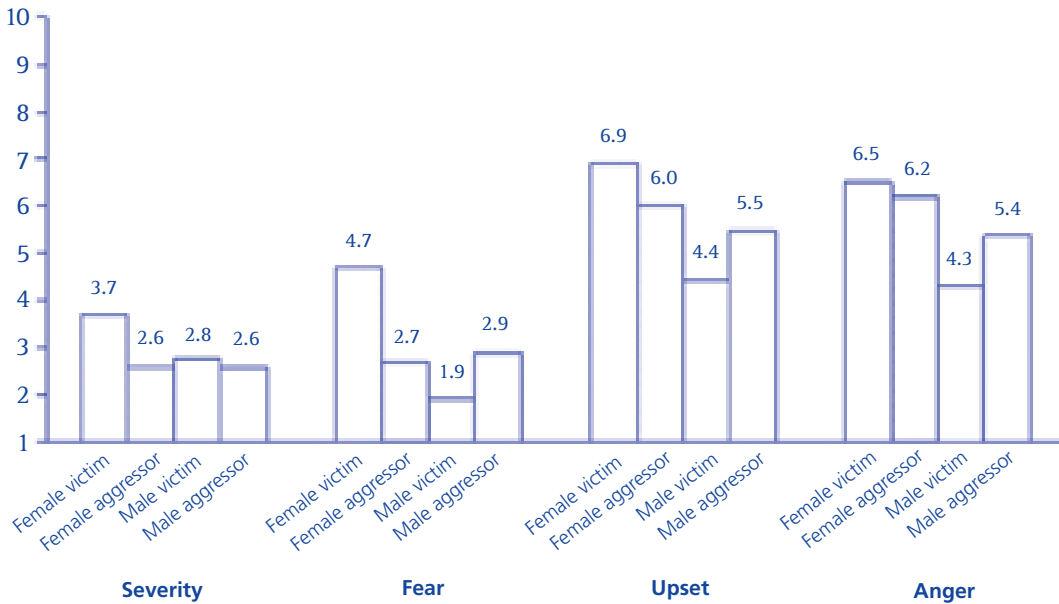


Figure 5 shows the respondent's ratings of severity of aggression by partner (for victims) and of the respondent's own aggression (for aggressors), as well as how scared, upset, and angry the respondent felt at the time of the aggression (all rated on a scale of 1–10). As shown in this figure, overall, female victims rated the partner's aggression as being more severe and themselves as more scared, upset, and angry, compared with ratings of aggression by female aggressors and male victims and aggressors. Male victims, on the other hand, gave lower ratings of fear, upset, and anger, compared to ratings by male aggressors and female victims and aggressors.

Among respondents who reported being the victim of partner aggression, female victims rated the aggression as being more severe than did male victims ($p < .001$), and female victims reported being significantly more afraid ($p < .001$), more upset ($p < .001$), and more angry ($p < .001$). Among aggressors, females rated themselves as significantly more upset ($p = .028$) and angry ($p = .003$), compared with ratings by male aggressors, but did not differ significantly on ratings of aggression severity or fear.

FIGURE 5. Mean ratings of severity of aggression, fear, upset, and anger by male and female victims and aggressors, GENACIS survey, Canada, 2004–2005.

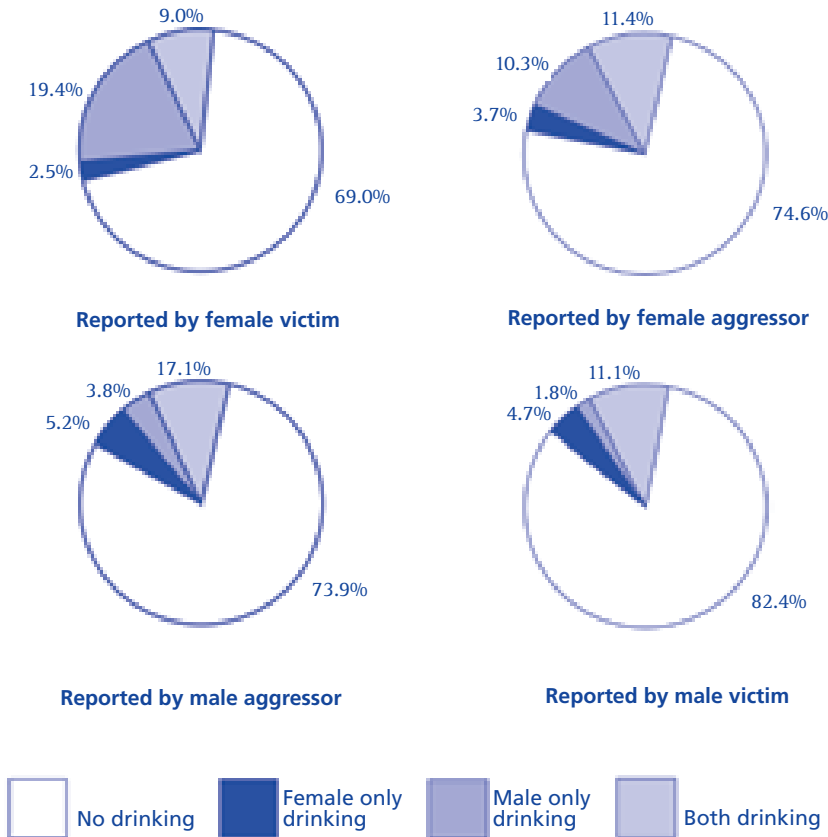


Comparing female victims to male aggressors, females rated the aggression by the male partner as significantly more severe and themselves as being more afraid, upset, and angry (all comparisons $p < .001$), compared with ratings made by male respondents who were aggressive toward a female partner. Male victims did not differ significantly from female aggressor in terms of their rating of aggression severity; however, ratings of fear, upset, and anger were significantly lower for male victims, compared with ratings made by female aggressors (all comparisons $p < .001$).

In addition to higher ratings of severity and fear, female victims were more likely than male victims to seek medical attention following the incident. Specifically, a significantly larger percentage of female victims (11.2%) than male victims (3.4%) sought medical attention after the incident ($p < .001$), and a larger percentage of male aggressors (5.4%) than female aggressors (1.7%) reported that their partner sought medical attention after the respondent's aggression (although this difference was not significant).

Figure 6 shows the extent to which alcohol was involved in incidents reported by female and male victims and female and male aggressors. As is evident in this figure, most incidents did not involve alcohol; this proportion ranged from 69.0% of incidents reported by female victims to 82.4% of those reported by male victims. Male victims were significantly less likely than female victims to report that at least one person had been drinking prior to the incident ($p < .001$), while there was no significant difference between male and female aggressors in terms of their reporting of whether anyone was drinking.

FIGURE 6. Percent of incidents in which no partner had been drinking, both partners had been drinking, only the male partner had been drinking, or only the female partner had been drinking, as reported by male and female victims and aggressors, GENACIS survey, Canada, 2004–2005.



Female victims were significantly more likely than male victims to report that only the aggressor had been drinking ($p < .001$), and female aggressors were more likely than male aggressors to report that only the victim had been drinking ($p = .046$). That is, female respondents were more likely to report that the male partner had been drinking than male respondents were to report that the female partner had been drinking. There were no significant differences between male and female victims regarding whether they reported that they themselves had been drinking or that both had been drinking.

For female victims compared to male aggressors (the two pie charts in Figure 6 on the left), female victims were significantly more likely than male aggressors to report that only the male was drinking ($p < .001$) and were less likely to report that both were drinking ($p = .011$). For male victims and female aggressors (the two pie charts in

Figure 6 on the right), female aggressors were significantly more likely ($p < .001$) than male victims to report that only the male was drinking.

Finally, incidents involving alcohol were rated as being more severe than were incidents that did not involve alcohol, regardless of whether the respondent was male or female or the victim or the aggressor. This difference was significant overall ($p < .001$) and when alcohol incidents were compared to incidents without alcohol for each of the four groups ($p < .001$ for female victims and aggressors and for male victims, and $p = .001$ for male aggressors), controlling for age in all analyses.

The Relationship between Alcohol Consumption and Partner Aggression

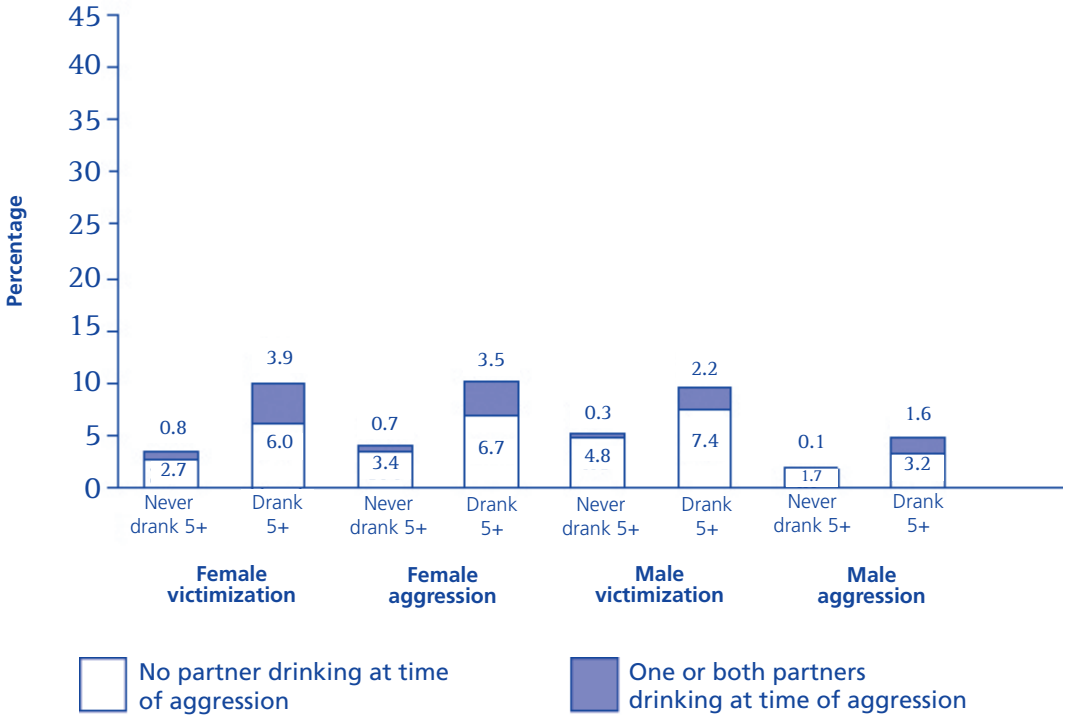
The percent of victims and aggressors was higher among those who drank alcohol in the year before the survey than among those who abstained, with 5.8% of female drinkers reporting being the victim of partner aggression and 6.5% reporting aggression toward a partner, versus 4.0% and 3.4%, respectively, for female abstainers. Among male drinkers, 8.0% reported being the victim of partner aggression and 3.8% reported aggression toward a partner, versus 3.6% and 1.9%, respectively, for male abstainers. Logistic regression of partner physical aggression (yes/no) on whether respondent was a past-year drinker (yes/no) controlling for age resulted in odds ratios that were significantly greater than one for male and female aggressors ($p < .05$) and male victims ($p = .001$), but not for female victims.

The analyses in the following section are limited to respondents who consumed alcohol during the year preceding the survey.

Respondents' Drinking Pattern and Partner Aggression

As shown in Figure 7, respondents who consumed five or more drinks on an occasion in the past year were more likely to report partner physical aggression, compared with respondents who reported never consuming as much as five drinks on an occasion. Multinomial logistic regression models were used to examine the relationship of consuming five or more drinks on an occasion with: (1) partner aggression without alcohol, (2) partner aggression with alcohol, and (3) no partner aggression (comparison category) controlling for age, and with separate models for female and male victims and aggressors. Respondents who consumed five or more drinks were significantly more likely than those who never consumed as much as five drinks in the past year to report partner aggression in which one or both partners had been drinking (versus no aggression) (female victims and aggressors: $p < .001$; male victims: $p = .003$; male aggressors: $p = .002$). Interestingly, respondents who consumed five or more drinks per occasion were also more likely than were respondents who did not consume as much as five drinks to report aggression that did not involve alcohol; however, this difference was significant ($p = .007$) only for reporting of victimization by female respondents.

FIGURE 7. Percent of respondents who reported victimization (aggression by a partner) or aggression (aggression toward a partner) when one or both partners had been drinking or neither had been drinking by whether respondents had consumed five or more drinks on an occasion or never had consumed five drinks on an occasion, by sex, GENACIS survey, Canada, 2004–2005.



Figures 8, 9, and 10 show the mean level of alcohol consumption (frequency of drinking in number of days per year, usual number of drinks consumed per occasion, and total number of drinks consumed annually) among those who reported (1) an aggressive incident in which one or both had been drinking, (2) an incident in which no one had been drinking, or (3) no aggression relating to male and female victimization and aggression. Multinomial logistic regression was used to compare the two groups who had experienced aggression (with alcohol, no alcohol) to those who reported no aggression in separate models for male and female victimization and aggression using each of the three alcohol consumption measures as predictors and controlling for age. These analyses indicated that all measures of alcohol consumption were significant predictors of aggression involving alcohol compared to no aggression for male and female victimization and male and female aggression (all comparisons $p \leq .001$). Usual level of alcohol consumption by those who reported an incident of aggression that did not involve alcohol tended to be higher compared with consumption by those who reported no aggression, but this difference did not meet the significance criterion of $p < .05$ except for usual quantity consumed by female victims ($p = .001$).

FIGURE 8. Mean number of drinking days in the year preceding the survey for respondents who had been victims or aggressors in incidents involving alcohol, in incidents not involving alcohol, or who reported no victimization or aggression, by sex, GENACIS survey, Canada, 2004–2005.

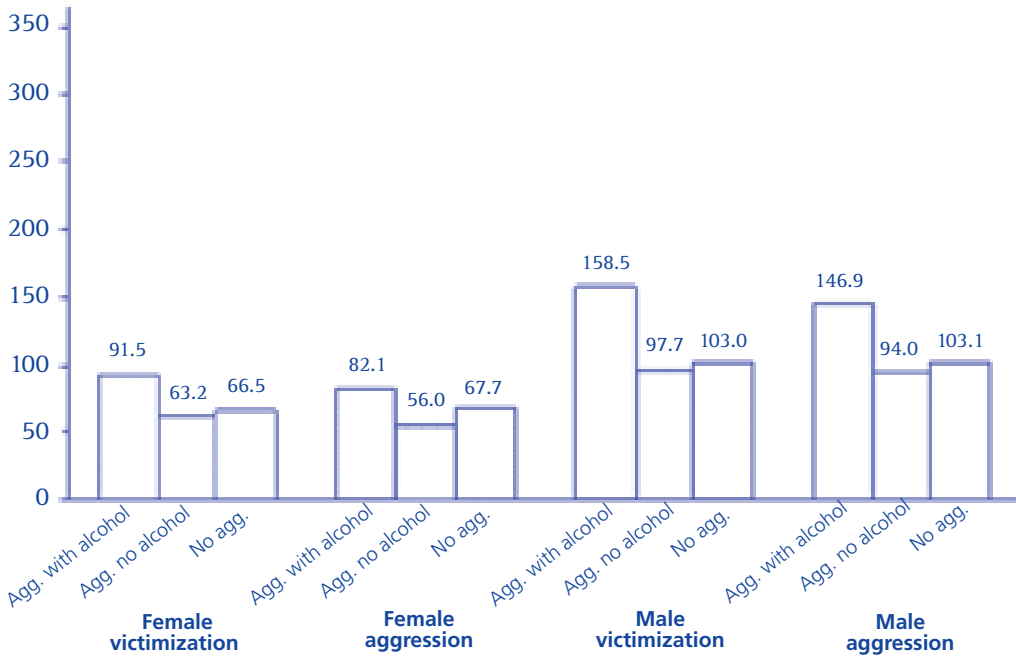


FIGURE 9. Mean number of drinks consumed on usual drinking occasions by respondents who had been victims or aggressors in incidents involving alcohol, in incidents not involving alcohol, or who reported no victimization or aggression, by sex, GENACIS survey, Canada, 2004–2005.

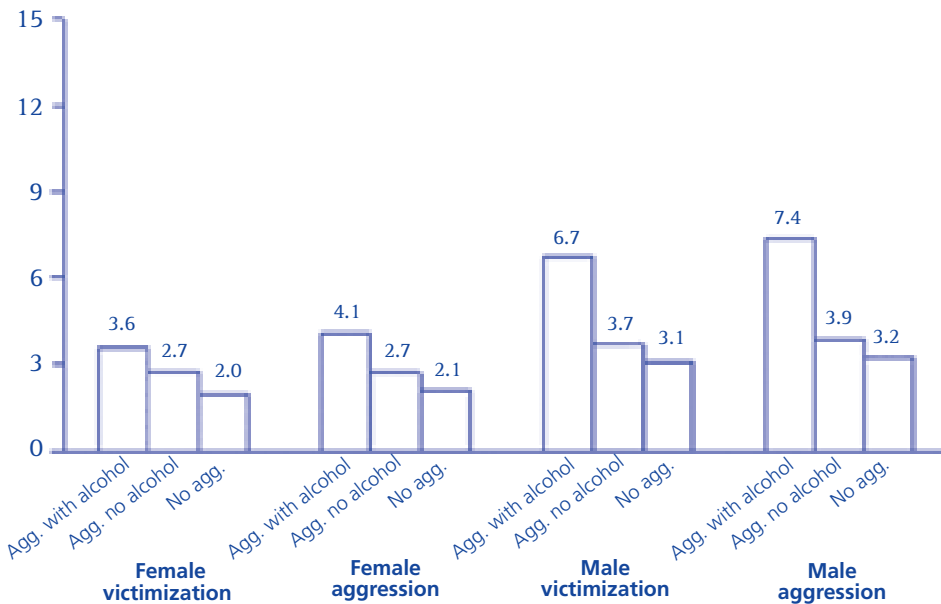
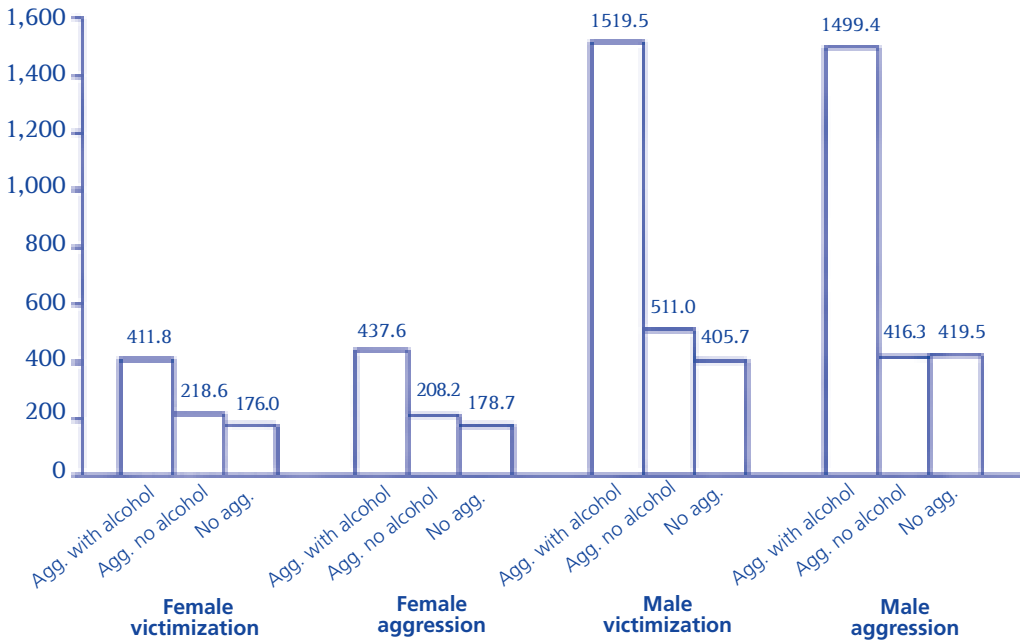


FIGURE 10. Overall mean number of drinks consumed annually by respondents who had been victims or aggressors in incidents involving alcohol, in incidents not involving alcohol, or who reported no victimization or aggression, by sex, GENACIS survey, Canada, 2004–2005.



When the drinking pattern of those who reported an incident involving alcohol versus those who reported an incident that did not involve alcohol (i.e., excluding respondents who reported no aggression) was compared using logistic regression (controlling for age), those who reported that the incident involved alcohol were significantly heavier drinkers compared to those who reported that the incident did not involve alcohol on all three measures of alcohol consumption (p values $< .01$ for all comparisons).

Discussion

Rates of partner aggression in the GENACIS Canada survey were slightly higher than those found in previous Canadian national surveys (Johnson, 2006), possibly because of the two-year rather than one-year time frame, possibly because the sample was limited to persons aged 76 and younger or because the definition of physical aggression included even minor aggression and did not specify whether the aggression occurred within the context of conflict. Although the decrease in partner aggression with age is similar to previous findings (Wilson, Johnson, and Daly, 1995; Johnson, 2006), a notable difference of the GENACIS results, compared to those of previous surveys, is that a higher proportion of male than female respondents reported being the victim of partner aggression. Part of this difference may be attributable to earlier surveys explicitly asking about sexual aggression (Johnson, 2006), while the GENACIS survey used an open-ended approach that did not preclude sexual aggression but did not specifically remind respondents to include it. Thus, rates of partner aggression may be underestimated, especially for female respondents, because forced sex was not listed explicitly in the examples of types of physical aggression.

An interesting pattern of partner aggression emerged relating to marital status; specifically, that married persons reported the lowest rate of partner aggression compared to cohabiting partners, divorced/separated, and never married. Surveys including questions on partner aggression, such as the GSS (Bunge and Locke, 2000; AuCoin, 2005), often include only persons who are currently married or were previously involved in a relationship. These results suggest the importance of also examining aggression between intimate partners who are not married or living together (i.e., the never-married group). In addition, this study confirms previous research of the increased risk of victimization for women who are divorced/separated (DeKeseredy, Rogness, and Schwartz 2004; AuCoin, 2005).

The current study adds to knowledge on partner aggression in Canada by allowing gender comparisons involving victimization by one gender and aggression by the other. For example, the higher rate of men than women reporting aggression by a partner is mirrored by the higher rate of women than men reporting aggression *toward* a partner. Thus, although we did not collect reports from both the male and female partners of the same couple, reports from men and women on both perpetration and victimization allow comparison that may identify important gender differences in how partner aggression is perceived or measured.

One such gender difference emerged regarding the severity ratings. Although female victims rated aggression against them as being more severe than did male victims (consistent with gender differences in severity found in previous research—see Johnson, 2006), male aggressors did not rate their own aggression toward female partners at the same level of severity as did female victims—that is, female victims perceived acts of aggression against them as being more severe than male aggressors rated their own acts toward female victims. This difference in rating of severity was not found between male victims and female aggressors.

A similar difference between victim and aggressor reports was apparent in reporting of type of aggressive act. While both male and female respondents reported that men were more likely to push, shove, and grab, while females were more likely than males to slap (which is consistent with gender differences in acts of aggression found in previous studies—see Johnson, 2006), female victims were more likely than male aggressors to report that the male partner punched or beat them up. Consistent with the victim's perspective, female victims were also more likely than male victims to seek medical attention following the incident.

Unfortunately, we do not know from the current study whether these victim/aggressor differences are due to underrepresentation in the survey of men who perpetrate more severe acts of violence or because men underestimate or underreport the severity of their own violence. The relatively low rate of aggression toward a partner reported by divorced/separated men, compared to the high rate of victimization reported by divorced/separated women, also suggests either reporting bias by some aggressive men or underrepresentation of some types of aggressive men, such as those who are divorced/separated.

In terms of gender differences in being afraid, upset, or angry, female victims gave the highest ratings (which would be expected, given that this group perceived the aggressive act as having been more severe than did other groups); however, the next highest ratings for upset and angry were by female aggressors, suggesting possibly a gender factor in either experiencing or reporting aggression. Interestingly, of the four groups, male victims rated themselves as the least afraid, upset, and angry. Thus, even though the current study did not explicitly include sexual aggression and did not include items regarding other aspects of emotional or psychological abuse, these findings reinforce results from previous studies suggesting that not only are women more likely than men to suffer physical injury from aggression, the emotional and psychological experience of aggression may be quite different for women than for men (Graham and Wells, 2001), as well.

Gender and victim/aggressor differences also emerged relating to which of the partners was drinking at the time of the incident. In particular, for female-to-male aggression, male victims were more likely than female aggressors to report that no one was drinking, while female aggressors were more likely to report that only the male victim was drinking. With regard to reporting of alcohol involvement for female victims versus male aggressors, there was a significant pattern for female victims to be more likely to report that only the male aggressor was drinking, while male aggressors were more likely to report that both or only the female was drinking. This is similar to findings from the 1999 GSS that female victims were more likely than male victims to report that the aggressor had been drinking (Bunge, 2000).

The results linking greater severity of aggression with drinking by one or both partners at the time of the incident confirm findings from previous research in Canada (Desjardins and Hotton, 2004). In the current study, despite gender and role differences in reporting who was drinking, there was a consistent pattern across male and female victims and aggressors for aggression to be rated as more severe in incidents in which one or both partners had been drinking, compared to incidents in which no one had been drinking. This suggests that alcohol may play an important role in the escalation of aggression or in the aggressor being unable to control the forcefulness of his or her aggression.

Previous studies of intimate partner aggression have identified a relationship between drinking pattern of the male partner and higher risk of violence against women (Johnson, 2000, 2006). In the present study, we analyzed the drinking pattern of the respondent, not the partner, but were able to examine this relationship for both victimization and aggression toward a partner, and for respondents whose most severe incident involved alcohol versus respondents whose most severe incident did not involve alcohol. A clear pattern emerged across all alcohol consumption measures; namely, that men and women who reported that their most severe incident involved one or both partners drinking, drank more frequently, more drinks per occasion, and more overall, compared with both respondents who reported no aggression and with respondents who reported that the most severe incident did not involve alcohol.

Although previous studies linking drinking and partner aggression have not tested whether the link is limited to aggression involving alcohol, the findings from the present study are consistent with previous research based on Canadian respondents that drinking pattern is linked to those reporting aggression involving alcohol but less

related to aggression that does not involve alcohol (Wells and Graham, 2003). However in the current analyses, there was a trend (significant only for female victims) for drinking more drinks per occasion to be higher for those who reported aggression that did not involve drinking, compared with those who reported no aggression. While the relationship between whether aggression involved drinking and respondent's frequency of drinking may simply reflect exposure or criterion contamination rather than an actual relationship between drinking and aggression (i.e., people who drink more often are more likely to have been drinking at the time of an aggressive incident purely by chance), the strong relationship with usual quantity consumed per occasion (even after controlling for age), taken together with the greater severity of aggression when alcohol is involved, suggests that other mechanisms may be involved. For example, the effects of alcohol on emotions, problem-solving, and risk-taking (Graham, West, and Wells, 2000) may influence the escalation of conflict to make aggression both more likely and more severe. There may, of course, be other factors linking drinking with violence, including risk factors for partner aggression being greater among heavier drinkers (Johnson, 2001), situational influences associated with drinking occasions (Wilkinson and Hamerschlag, 2005), and heavier drinking being a consequence rather than a cause of partner aggression (Martino, Collins, and Ellickson, 2005).

Some limitations are noteworthy in the present analyses. First, some partner violence would have been missed because the questions focused only on physical aggression and did not include verbal threats or emotional or psychological abuse or explicitly ask about sexual aggression. On the other hand, as was evident from the kinds of acts described and the severity ratings, the question was able to elicit even minor aggression, in that many respondents were describing very minor acts of aggression that would not necessarily constitute "abuse." Including even minor aggression may be an important aspect of this approach because existing research suggests that the majority of homicides between intimate couples in Canada were preceded by a history of violence between the victim and the accused (Johnson, 2006).

Acknowledgments

Funding for this research was provided through an operations grant from the Canadian Institutes of Health Research. Kathryn Graham was Principal Investigator and Andrée Demers was Co-Principal Investigator. Sharon Bernards was Project Coordinator. Co-Investigators were Louise Nadeau, Jürgen Rehm, Sylvia Kairouz, Colleen Ann Dell, Christiane Poulin, Anne George, and Samantha Wells. We are grateful to the staff at the Institute for Social Research at York University and to Jolicoeur and Associates for their assistance in implementing the survey. This research was conducted in Canada as part of the GENACIS initiative, a collaborative multinational project led by Sharon Wilsnack and affiliated with the Kettil Bruun Society for Social and Epidemiological Research on Alcohol.

References

- AuCoin K. (Ed.) (2005). *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85-224-XIE
- Brownridge D. (2002). Cultural variation in male partner violence against women: A comparison of Quebec with the rest of Canada. *Violence against Women*, 8(1), 87-115.

- Bunge VP. (2000). Spousal violence (pp. 11–26). In V. P. Bunge & D. Locke (Eds.), *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85–224–XIE
- Bunge VP, Locke D. (eds.) (2000). *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85–224–XIE
- Dekeseredy WS, Rogness, M. and Schwartz, M.D. (2004). Separation/divorce sexual assault: The current state of social scientific knowledge. *Aggression and Violent Behavior*, 9, 675–691.
- Desjardins N, Hotton T. (2004). Trends in drug offences and the role of alcohol and drugs in crime. *Juristat* (Statistics Canada – Catalogue no. 85–002–XPE, Vol. 24, no. 1), Canadian Centre for Justice Statistics.
- Graham K, West P, Wells S. (2000). Evaluating theories of alcohol-related aggression using observations of young adults in bars. *Addiction*, 95(6), 847–863.
- Graham K, Wells S. (2001). The two worlds of aggression for men and women. *Sex Roles. A Journal of Research*, 45, 595–622.
- Johnson H. (2000) The role of alcohol in male partners' assaults on wives. *Journal of Drug Issues*, 30, 725–740.
- Johnson H. (2006) *Measuring violence against women. Statistical trends 2006*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics, Canada.
- Johnson H. (2007) Preventing violence against women: Progress and challenges. *Institute for the Prevention of Crime Review*, 1, 69–88.
- Johnson H, AuCoin KA. (Eds.) (2003) *Family violence in Canada. A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics, Canada.
- Locke D. (2000). Family homicide (pp. 39–44). In V. P. Bunge & D. Locke (Eds.), *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85–224–XIE
- Martino SC, Collins RL, Ellickson PL. (2005). Cross-lagged relationships between substance use and intimate partner violence among a sample of young adult women. *Journal of Studies on Alcohol*, 66, 139–148.
- Mihorean K. (2005). Trends in self-reported spousal violence. In K. AuCoin (Ed.) *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85–224–XIE
- Statistics Canada. Overview 2006. Population by sex and age group. http://www40.statcan.ca/l01/ind01/l2_3867.htm
- Trainor C. (Ed.) (2002). *Family violence in Canada: A statistical profile*. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada. www.statcan.ca. Catalogue no. 85–224–XIE
- Wells S, Graham K. (2003). Aggression involving alcohol: Relationship to drinking patterns and social context. *Addiction*, 98(1), 33–42.
- Wilkinson DL, Hamerschlag SJ. (2005). Situational determinants in intimate partner violence. *Aggression and Violent Behavior*, 10, 333–361.
- Wilson M, Johnson H, Daly M. (1995). Lethal and nonlethal violence against wives. *Canadian Journal of Criminology*, 37(3), 331–361.