

Lethal and nonlethal violence against wives⁽¹⁾

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Les profils démographiques du risque de violence mortelle et non mortelle envers la conjointe au Canada ont été comparés grâce aux données obtenues de l'Enquête sur l'homicide au Canada (1974-1992) de Statistique Canada et de l'Enquête sur la violence envers les femmes (1993). Les comparaisons étaient fondées sur 1,429 victimes d'uxoricide et sur 8,385 interviewées, dont 277 avaient été victimes de voies de fait de la part de leur mari au cours des 12 derniers mois. Nous nous attendions à ce que la violence mortelle et la violence non mortelle affichent des profils de risques parallèles en ce qui a trait aux facteurs démographiques parce que la possessivité sexuelle mâle semblait être le facteur sous-jacent dominant, que ce soit pour la violence mortelle ou non mortelle envers la conjointe. Certains profils démographiques de risques étaient semblables pour les incidents mortels et non mortels. En particulier, (1) les conjointes couraient un risque beaucoup plus élevé de violence, tant mortelle que non mortelle, dans les unions libres que dans les mariages; (2) dans les mariages, les risques de violence mortelle et non mortelle diminuaient de façon semblable selon l'âge de la femme, mais dans les unions de fait, le risque d'uxoricide augmentait jusqu'à l'âge moyen, alors que les taux de violence non mortelle diminuaient à peu près de la même façon que dans les mariages; (3) les taux d'uxoricide augmentaient de façon marquée avec l'accroissement de la différence d'âge des partenaires conjugaux, tant dans les mariages que dans les unions libres, mais il ne semblait pas y avoir de relation entre la différence d'âge et les taux de violence non mortelle.

Demographic patterns of risk of lethal and nonlethal violence against wives in Canada were compared utilizing Statistics Canada's Homicide Survey (1974-1992) and Violence Against Women Survey (1993). Comparisons were based on 1,429 uxoricide victims and 8,385 interviewees of whom 277 had been assaulted by their husbands within the past 12 months. We anticipated that lethal and nonlethal violence would exhibit parallel patterns of risk in relation to demographic factors because male sexual proprietariness appears to be the dominant underlying issue in both lethal and nonlethal violence against wives. Some, but not all, demographic risk patterns were similar for lethal and nonlethal incidents. In particular: (1) Wives incurred much greater risk of both lethal and nonlethal violence in commonlaw unions than in registered unions; (2) In registered unions, the risks of lethal and nonlethal violence declined in similar fashion in relation to the wife's age, but in commonlaw unions, uxoricide risk increased until "middle-age", whereas the rates of nonlethal violence declined in much the same way as in registered unions; (3) Uxoricide rates increased sharply as the age disparity of marital partners increased, in both registered and commonlaw unions, but there was no apparent relationship between age disparity and rates of nonlethal violence.

It is an implicit assumption of those who study and deal with violence against wives that lethal and nonlethal violence share commonalities of motive and causal dynamics, and of the circumstances, attributes of marital history and other factors exacerbating or mitigating risk. However, there is also considerable theoretical and practical interest in identifying factors which may be of differential relevance to lethal and nonlethal risk (Campbell 1986).

The 1993 Statistics Canada Violence Against Women Survey, in which a national probability sample of women was interviewed about their experiences of nonfatal violence by husbands and former marital partners (Johnson 1995; Johnson and Sacco 1995) affords an unusual opportunity to elucidate demographic and other risk patterns of nonlethal violence against wives. Regarding lethal violence, Statistics Canada also maintains a victim-based archive of all Canadian homicides known to police since 1974. For this paper, data on uxoricide (killing of wives) were extracted from the Statistics Canada Homicide Survey in order to compare the patterns of risk of fatal violence with the patterns of risk of nonfatal violence as revealed in the 1993 Violence Against Women Survey.

Most criminological studies of violence focus on variations in rates between times and places. Our more epidemiological approach focuses on identifying the demographic patterns of risk characteristic of specific categories of interpersonal relationship

(Daly and Wilson 1988a; 1988b). Marital and marital-like relationships have many possible sources of conflict, some of which are of distinct relevance to this relationship. In particular, the issues of fidelity, sustained commitment to the relationship, and other aspects of marital entitlements are especially potent sources of marital conflicts. We expect the intensity of these conflicts to vary in relation to the couple's ages and circumstances, on the basis of two premises for which we have argued elsewhere (Dobash, Dobash, Wilson, and Daly 1992; Wilson and Daly 1992a; 1992b; 1992c; 1993a, 1993b): (1) that violence against wives is psychologically linked with male sexual proprietariness, and (2) that nonlethal violence is used coercively, with some sensitivity to cues indicative of the likelihood that the violence will serve the perpetrator's interests. (The second point does not presuppose that violence is used with conscious coercive intent, but only that there is a sort of self-interested functionality to human emotions.)

Male sexual proprietariness

"Jealous" and "possessive" are the terms most often used to describe the mindset of men who have beaten or killed wives (Barnard, Vera, Vera, and Newman 1982; Daly, Wilson, and Weghorst 1982; Polk 1994; Polk and Ranson 1991; Dobash and Dobash 1979; Campbell 1992; Showalter, Bonnie, and Roddy 1980). Wilson and Daly (1992a) have preferred to use the term "proprietary" as this word implies a more encompassing mindset, referring not just to the emotional force of one's desire for exclusivity, but also to feelings of entitlement. Although there is cross-cultural and historical variation in the institutional and structural manifestations of men's sexual proprietariness, including such cultural practices as infibulation, foot-binding, veiling, and prohibition of widow remarriage (Wilson and Daly 1992a), and although women are variably effective in resisting male control, fatal and nonfatal violence are cross-culturally ubiquitous outcomes of marital conflict over female autonomy (Allen 1990; Bohannan 1960; Chimboos 1978; Counts 1990; Counts, Brown, and Campbell 1992; Crawford and Gartner 1992; Cusson and Boisvert 1994; Daly, Wilson, and Weghorst 1982; Dell 1984; Dobash and Dobash 1979; Levinson 1989; Wilson and Daly 1992b, 1992c, 1993b).

In any sample of well-described uxoricide cases, a large majority were evidently precipitated by the husband's accusing the wife of sexual infidelity (whether with reasonable grounds for

suspicion or not), by her unilateral decision to terminate the relationship, and/or by a more generalized inability to control her (Daly and Wilson 1988b; Wilson and Daly 1993a; Polk 1994). The main motivational circumstances in non-lethal wife assault are apparently similar: adultery, jealousy, desertion, and male control (Counts 1990; Counts, Brown, and Campbell 1992; Dobash and Dobash 1984; Hilberman and Munson 1978; Rounsaville 1978). These similarities in "motive" suggests that uxoricides may be the "tip of the iceberg" of nonfatal assaults against wives.

Coercive control of wives

The idea that uxoricides are in some sense motivated by husbands' concern to protect their proprietary entitlements may appear paradoxical. Yet, it is precisely the loss or violation of these proprietary entitlements that seems to move many uxoricidal men: "If I can't have her, then no-one shall" (Campbell 1992; Daly and Wilson 1988b; Polk 1994). Certainly, when a wife is pursued and killed by a husband she has left (Wilson and Daly 1993a), the killer's motive cannot merely be rid of her, yet, if keeping her is his aim, killing is clearly counterproductive. Thus, although such killings are often deliberate and even carefully planned, they are anything but rationally instrumental. They are more plausibly interpreted as the dysfunctionally extreme manifestations of proprietary and violent inclinations whose lesser expressions are effective in coercion, for although uxoricide seems clearly to overstep the bounds of utility, it is far from clear that the same can be said of nonlethal wife abuse. A credible threat of potentially lethal violence can be a powerful means of controlling others, and the risks incurred by estranged wives suggest that such threats by husbands are often sincere (Wilson and Daly 1992d; 1993a). Moreover, unlike threats or assaults directed at strangers, the coercive use of violence by husbands has often had a legitimacy that enhances the coercive power of the threats (Dobash and Dobash 1979; Safilios-Rothschild 1969; Besse 1989).

If the coercive use of violence is best understood as one means by which uxorial proprietary claims are maintained, then male sexual proprietariness and attendant use of violence may vary (both within and between communities or societies) in similar ways in relation to: (1) indicators of the intensity of male sexual rivalry, (2) cues of possible marital infidelity, (3) various factors

affecting the woman's attractiveness to potential rivals and her autonomy, and (4) the costs of using violence (Wilson and Daly 1993b). Neither the Homicide Survey nor the Violence Against Women Survey provides all the information needed to test such hypotheses, but several demographic variables recorded in these surveys, such as ages, the type of marital union, and estrangement may be predictably related to variations in male sexual proprietariness and, hence, violence against wives. Detailed hypotheses about the links between risk of violence and these demographic variables are outlined with the presentation of our analyses.

The circumstance that is perhaps most frequently invoked as a correlate or cause of violence is poverty (Krahn, Hartnagel, and Gartrell 1986; Messner and Tardiff 1986; Hsieh and Pugh 1993), and the hypothesis that poor socioeconomic circumstances are conducive to marital violence is appealing. It is obvious that family financial strains are generally stressful, and they are often a major source of marital conflict (Messinger 1976; Conger, Ge, Elder, Lorenz, and Simons 1994). Moreover, there is considerable evidence that women prefer men with good financial prospects as husbands (Buss 1994), and that, while wealth increases a man's likelihood of marrying, poverty elevates the risk of divorce (Guttman 1993; Gibson 1994). In societies which permit polygamy, only affluent men can afford multiple wives (Betzig 1986; Borgerhoff Mulder 1988), and even, in monogamous societies, well-to-do men are especially likely to have multiple wives successively (Glick and Lin 1987). In general then, poor economic circumstance is a cue of some genuine risk of losing one's wife, and may therefore be expected to arouse sexually proprietary and, perhaps, coercive feelings in a husband. Several studies of violence against wives suggest that poverty is indeed an important risk factor (Rodgers 1994; Hotelling and Sugarman 1986). However, economic status appears to be a weaker correlate of violence against wives than of other violent crimes. In this paper, we assess whether women's reports of experiencing violence vary in relation to household income, although we do not have the relevant data to examine the same issue for the homicide cases.

Our main objectives are twofold: (1) to compare demographic patterns of risk in lethal versus nonlethal cases of violence against wives, and (2) to assess whether manifestations of controlling

behaviour and propriety that are not necessarily violent exhibit parallel demographic risk patterns and are specifically characteristic of violent husbands.

Method

Uxoricides

The Statistics Canada homicide archive (the "Homicide Survey") is a victim-based datafile of all Canadian criminal homicides known to police. Police report every homicide on a standardized reporting form, which underwent a major revision in 1991 to include additional information on the circumstances of the homicide. This Homicide Survey contains, among other things, information on the sex, age, and marital status of victim and killer, as well as their relationship, which has been categorized into many types including "commonlaw wife", "wife", "separated wife", "divorced wife", "girlfriend", "estranged lover", and "extramarital lover". In the case of "commonlaw" (i.e., de facto) marital relationships, how police should code dissolved unions has been inexplicit, and ex-commonlaw is not a marital status code (neither in the Homicide Survey nor in the census). Thus, former commonlaw marrieds may sometimes have been coded by police as "estranged lover", "close friend" or even "acquaintance", and any such cases would have been excluded from our analyses of spousal homicides. "Girlfriends" and "lovers" are also excluded from the following analyses as it is not possible to compute homicide rates without the corresponding information on numbers of such relationships in the population-at-large.

Analyses in this paper are based on case-by-case information for 1974 through 1992. The homicide datafile maintained by Statistics Canada is continually updated as new information becomes available; data in this paper were current as of December, 1993. Homicide rates have been computed relative to the population at risk. Homicide rate denominators were computed from census information on the numbers of persons in relevant sex and age classes, marital statuses, and so forth; for details of the methodology see Wilson, Daly and Wright (1993).

Non-lethal violence against wives

For the 1993 Violence Against Women Survey, Statistics Canada selected a representative stratified national probability

sample of women for telephone interviews. (Ninety-eight percent of Canadian households have telephones.) A more detailed description of the survey methodology is reported by Johnson and Sacco (1995). The data from this national survey are available as a public archive (Statistics Canada 1994) except for information on the husbands' age. The 12,300 Canadian women (age 18 and over) who completed the survey were interviewed about their experiences of threats of violence, sexual and physical violence by marital partners and other men, injuries sustained, and assistance from community services, as well as their perceptions of safety, forms of sexual harassment, and demographic background information. For purposes of this paper, interviewees included 8,385 women currently residing with spouses⁽²⁾: 7,363 in registered marriages and 1,022 in common-law marriages.

Among many other questions, respondents were asked a series of ten yes/no questions, in the order indicated below, about physical violence by the current marital partner:

1. *Has your husband/partner ever threatened to hit you with his fist or anything else that could hurt you?*
2. *Has he ever thrown anything at you that could hurt you?*
3. *Has he ever pushed, grabbed, or shoved you?*
4. *Has he ever slapped you?*
5. *Has he ever kicked, bit, or hit you with his fist?*
6. *Has he ever hit you with something that could hurt you?*
7. *Has he ever beaten you up?*
8. *Has he ever choked you?*
9. *Has he ever threatened to or used a gun or knife on you?*

10. *Has he ever forced you into any sexual activity when you did not want to, by threatening you, holding you down, or hurting you in some way?*

This series of questions was prefaced with the following remarks:

We are particularly interested in learning more about women's experiences of violence in their homes. I'd like you to tell me if your husband/partner has ever done any of the following to you.

In order to reduce the burden of persistent questioning about violent acts if none had occurred, the interviewer asked whether the husband/partner had ever been violent in any other way after every two or three of the above ten questions, and a "no" statement ended this series of questions about that relationship. The refusal rate for any of these ten questions about violence by marital partner was less than 1%. Several questions were also asked about the time frame of the violent incidents.

In this paper we compute rates on the basis of incidents which occurred in current coresiding unions within the 12 months prior to the interview, for purposes of comparison with annual uxoricide rates. In addition, for other comparisons within the Violence Against Women Survey data, we have distinguished those women who reported that they were assaulted or threatened within the past year from those whose most recent such experience was prior to the past year and from those women who were never threatened or assaulted by their current marital partners. We also compare women who had experienced multiple incidents of violence with those who had experienced none or only one incident.

The rates of nonlethal violence reported in this paper are presented as estimates for all Canadian women in the relevant age and marital status categories: the weighting factor applied to the interview data reflected the sex and age structure of the stratified probability sample for each geographic region (Johnson and Sacco 1995; Statistics Canada 1994). Weighted estimates are also presented for the demographic variables associated with the rates of nonlethal violence. It should be noted that the non-lethal assault rates are presented as rates per 100 wives, while the uxoricide rates are presented as rates per million wives.

(Thus, uxoricide rates can be compared directly with nonlethal rates of violence by multiplying the latter by 10,000).

Immediately before women were asked the ten questions about their experiences of violence by marital partners, a series of five items assessed the respondents' perceptions of whether their husbands engaged in controlling, denigrating, and proprietary behaviours, which we refer to collectively in this report as "autonomy limiting". These items were introduced thus:

I'm going to read a list of statements that some women have used to describe their husband/partner. Thinking about your husband/partner, I'd like you to tell me whether or not each statement describes him.

1. *He is jealous and doesn't want you to talk to other men.*
2. *He tries to limit your contact with family or friends.*
3. *He insists on knowing who you are with and where you are at all times.*
4. *He calls you names to put you down or make you feel bad.*
5. *He prevents you from knowing about or having access to the family income, even if you ask.*

The refusal rate for any of these questions was less than 1%. Responses to the five items were significantly ($p < .001$) and positively correlated with each other: the ten correlation coefficients ranged from +0.17 to +0.42. A composite summary "autonomy-limiting index" was computed for each woman by summing the number of her "yes" responses to these 5 items.

Respondents were also asked about the past year's total household income categorized into ten income categories (in thousands of dollars): < 5, 5-10, 10-15, 15-20, 20-30, 30-40, 40-50, 50-60, 60-80, more than 80. The weighted frequency distribution of persons in these 10 categories was used to compute an estimate of average household income for different demographic categories of women. The midpoint of each category was taken as the household income with the conservative estimate of 85 for incomes above 80 thousand dollars. Income

information was not obtained in 12.5% of the 8,385 interviews of coresiding wives (a much higher rate of missing data than for any other variable analyzed here): 4.9% refused to answer and an additional 7.6% said they did not know.

Logistic regressions (Norusis 1993) were computed to assess the effects of household income, type of marital union (registered vs commonlaw), age of wife, and absolute age difference of husband and wife on (i) the probabilities of reporting violence having occurred in the marriage within the past year, and (ii) the probabilities of affirming or not affirming any of the five autonomy-limiting statements about husbands. For these analyses, the absolute age difference was used since uxoricide rates are a non-monotonic function of age differences, increasing with age disparity in either direction (Daly and Wilson 1988b).

Results and discussion

Estrangement

If the coercive use of violence is one means by which uxorial proprietary claims are maintained by husbands, then it follows that resolving to leave one's husband may be associated with elevated risk of violence, including risk of being killed. Because the decision to leave is covert, it is difficult to compare the risks incurred by women who intend to leave with the risks incurred by other coresiding women. However, one can assess the risk incurred by those who have actually separated.

According to the Homicide Survey, Canadian wives in registered unions incur substantially elevated risk when separated despite the separated woman's lesser availability to her assailant: for uxoricides occurring between 1974 and 1990, the rates were 5.6 per million coresident wives and 28.6 per million separated wives (Wilson and Daly 1993a). According to the 1993 Violence Against Women Survey (Johnson 1995), 19% of separated wives were physically abused by the former spouse while separated (as indicated by affirmation to the question "Did it happen after you split up?"), and the abuse increased after separation in 35% of these cases (as indicated by affirmation to the question "Do you think it increased after you split up?").

Thus, the fatal and nonfatal assault data support the widespread apprehension that wives often experience elevated

risk when deserting a violently proprietary husband. Elucidation of the time-course of this elevated risk would be of value in making practical decisions about protective measures, but neither survey provides evidence bearing on the duration of the period in which estranged wives remain at elevated risk of either fatal or nonfatal violence. In an Australian study, 47% of separated uxoricide victims in New South Wales were killed within two months of the separation (Wallace 1986).

Severity and recurrence of violence in relation to attempts to limit wives' autonomy

Eighteen percent of the 8,385 respondents affirmed that their husbands/partners engaged in one or more of the five "autonomy-limiting" behaviours. To assess whether these responses varied systematically with severity or chronicity of violence experienced, we computed the percentages of women affirming each of these items within groups distinguished by different experiences of violence in their present marriages.

For the severity groupings, women were categorized as victims of "serious" violence if they affirmed one or more of violence items 7 through 10 (3.4% of coresiding wives surveyed [unweighted percent] and 3.3% when estimated for all coresiding Canadian wives [weighted percent]); as victims of "non-serious" violence if they affirmed any of items 1 through 6 but not 7 through 10 (12.4% and 11.7%, unweighted and weighted percents, respectively); or as "no violence" (84.2% and 85%, unweighted and weighted percents, respectively). The validity of this criterion of "seriousness" is supported by injury data: among women who were interviewed further about one incident of violence perpetrated by a coresiding spouse, 72% of those affirming serious violence (i.e., any one or more of items 7-10) reported having incurred an injury requiring medical attention, compared to 18% of those who reported an incident meeting only the criterion for non-serious violence. Moreover, wives more often reported fearing that their lives were in danger in incidents meeting the criterion of serious violence (56%) than in incidents of non-serious violence (9%). Table 1 indicates that violent husbands were more likely than nonviolent husbands to be perceived by their wives as controlling, derogatory, and proprietary whether one considers the five individual items or the composite "autonomy-limiting" index. Moreover, for each measure, the percentages were higher for women who had experienced serious violence than for those who had experienced

only non-serious violence. Table 1 shows that those women who had experienced more serious violence were indeed those most likely to affirm that their husbands engaged in other autonomy-limiting behaviour as well (with respect to the mean autonomy-limiting index value: $F = 1047.9$, $df = 2/8382$, $p < .00001$).

Table 1
Percent of wives affirming the applicability of "autonomy limiting" items to the behaviour of their current husbands (registered and commonlaw unions combined), in relation to perpetration of violence by the husband.

	Violence by the husband		
	None N = 6990	Only "non- serious" ^a N = 1039	"Serious" ^b N = 286
"He is jealous and doesn't want you to talk to other men".	3.5	13.0	39.3
"He tries to limit your contact with family or friends".	2.0	11.1	35.0
"He insists on knowing who you are with and where you are at all times".	7.4	23.5	40.4
"He calls you names to put you down or make you feel bad".	2.9	22.3	48.0
"He prevents you from knowing about or having access to the family income, even if you ask".	1.2	4.6	15.3
Mean (\pm SD) autonomy-limiting index ^c (range 0-5)	0.17 \pm 0.53	0.74 \pm 1.08	1.78 \pm 1.51

^a Non-serious: see methods for definition of violence items 1-6.

^b Serious: see methods for definition of violence items 7-10.

^c Index: average number of autonomy-limiting items affirmed by wives in sample; see methods.

Source: Violence Against Women Survey, Statistics Canada, 1993

For chronicity groupings, women were categorized according to their responses to the question "How many different times did these things happen?", posed after the series of questions about violent acts. As noted above, 84.2% of the surveyed women living with spouses reported no violent incidents. Most of the remainder

(9.4% unweighted and 9.1% for weighted estimate) reported only one, while 4.6% (unweighted and weighted) reported 2 to 10 incidents, and 1.8% (1.5% weighted estimate) reported 11 or more. If violence is a manifestation of men's inclinations to exert coercive control, then such violence might be expected to covary with other autonomy-limiting behaviours. Table 2 shows that those women who had experienced violence more often were indeed those most likely to affirm that their husbands engaged in other autonomy-limiting behaviour as well ($F = 766.9$, $df = 3/8318$, $p < .00001$).

Table 2
Average autonomy-limiting index values for women who have experienced different numbers of violent incidents during their current marriages (registered or commonlaw).

	Mean \pm S.D.
No Violence (N = 6990)	0.17 \pm 0.53
Single Incident (N = 788)	0.65 \pm 1.02
2-10 Incidents (N = 390)	1.13 \pm 1.26
11 or more Incidents (N = 154)	2.20 \pm 1.50

Source: Violence Against Women Survey, Statistics Canada, 1993

Demographic risk patterns

Type of marital union

There is reason to suppose that husbands may be less secure in their proprietary claims over wives in commonlaw unions than in registered unions. Until relatively recently, uxorial entitlements and obligations were firmly reinforced in registered marital unions by legal, religious, and other social institutions, but were less so or not at all so reinforced in de facto unions (Dobash and Dobash 1979; Wilson and Daly 1992a). Perhaps, in part, because of values and expectations associated with the socially and legally enforced commitments that marital registration entailed in the past, commonlaw marriages may be less committed to the alliance. In fact, commonlaw unions are often "trial" marriages with relatively short durations and a

relatively high incidence of break-ups (Booth and Johnson 1988; Bumpass and Sweet 1989; Wu and Balakrishnan 1992). Moreover, there is some direct evidence for a greater incidence of conflicts within commonlaw couples than within registered couples (Macklin 1972; Sarantakos 1984).

In Canada in 1974-1992, the uxoricide rate was about eight times greater in coresiding commonlaw marital unions than in coresiding registered unions (Table 3). And according to the 1993 Violence Against Women Survey, the rate of nonfatal violence against wives was about four times higher in coresiding commonlaw unions than in registered unions (Table 3).

Table 3
Rates of violence against women by coresiding marital partners according to the type of marital union.

	Registered	Common-law
Uxoricide per million wives per annum	7.2	55.1
Nonlethal assault in past year per hundred wives per annum	2.0	9.0

Source: Violence Against Women Survey and Homicide Survey, Statistics Canada, 1993.

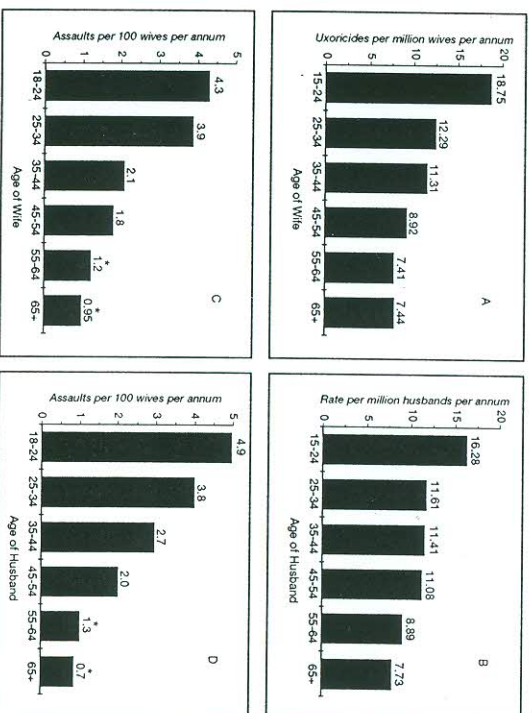
Commonlaw and registered marital unions differ in many ways, and the higher risk of uxoricide and assault in the former may be attributable to a combination of factors. Commonlaw unions are generally more prevalent among the poor and the young (Bumpass and Sweet 1989; Khoo 1987; Spanier 1983; Turcotte 1988; Wu and Balakrishnan 1992), and poverty and young adulthood are both associated with higher homicide rates (Daly and Wilson 1990). Another difference between commonlaw and registered unions is that commonlaw marriages are more often childless than are registered unions for a given duration of marriage (Statistics Canada 1987; Turcotte 1988; Barr 1993). Joint offspring promote marital solidarity, and childlessness is associated with marital conflict and divorce (Rasmussen 1981). Stepchildren are more prevalent in commonlaw unions than in registered unions (Bumpass, Sweet, and Cherlin 1989; Khoo 1988) and the presence of stepchildren is itself a risk factor for nonlethal violence against wives (Daly, Singh, and Wilson 1993). Whether adultery and desertion are greater sources of conflict

in commonlaw unions than in registered unions is unknown, but it is clear that commonlaw unions are more likely to break up than registered unions (Dumas and Péron 1992; McDaniel 1994; Thornton 1988).

Age of wife

The wife's youth is one partial predictor of marital instability (Dumas and Péron 1992; McKie, Prentice, and Reed 1983), perhaps partly because younger women are confronted with more options. The younger a divorcee, the greater her likelihood of remarriage (Glick and Lin 1987; Trost 1984). All else being equal, youth makes a woman more attractive to men (Borgerhoff Mulder 1988; Cunningham 1986; Deutsch, Zaleski and Clark 1986; Kenrick and Keele 1992). These considerations, as well as childlessness and other opportunity factors, suggest that young wives may be especially likely to be subject to the attentions of men other than their husbands, to form new sexual relationships, and to terminate unsatisfactory marriages. Thus, we may expect that jealous, proprietary, coercive motives and actions may be especially prevalent among men with younger wives.

Figure 1
Comparison of age-specific rates of lethal and nonlethal assaults in registered marriages. Uxoricides per million wives per annum as a function of wife's age (A) and husband's age (B) in Canada 1974-1992. Nonlethal assault rates per hundred wives per annum as a function of wife's age (C) and husband's age (D) in Canada 1993.



*Unreliable estimate because of small sample size.

As we have noted previously (Daly and Wilson 1988a; 1988b; Wilson, Daly and Wright 1993) on the basis of subsets of the homicide data analyzed here, the youngest wives indeed incur the greatest uxoricide risk in registered marriages in Canada (Figure 1A). The same is true in the United States (Mercy and Saltzman 1989) and in Britain (Wilson, Daly and Scheib, forthcoming). For the much more frequent occurrence of nonlethal violence, the Violence Against Women Survey data indicate a parallel age pattern (Figure 1C). Similarly, according to victimization surveys in the United States (Gaguin 1977/78; Straus, Gelles, and Steinmetz 1980) and in New Zealand (Fergusson, Horwood, Kershaw, and Shannon 1986), rates of nonlethal assault against wives decrease as a function of the wife victim's age.

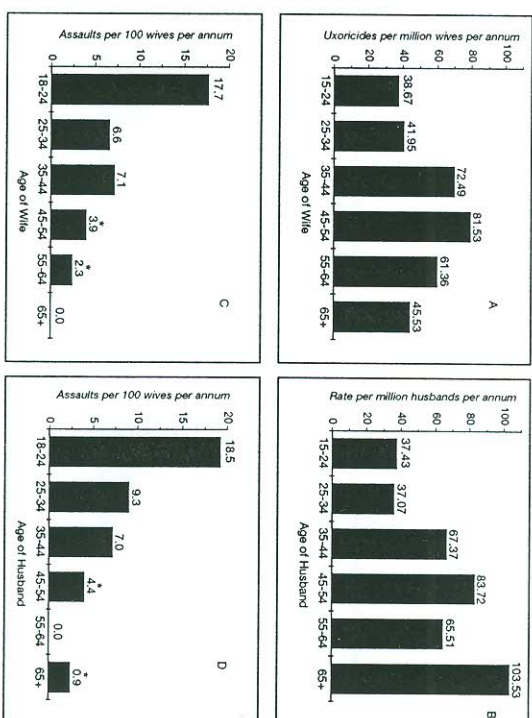
The wife's age is correlated with several variables which may be more directly "causal" to the risk of violence. One such correlate is of course the husband's age. In Canada and elsewhere, young men are the most violent sex/age class regardless of who their victims are (Wilson and Daly 1985, 1994; Daly and Wilson 1990; Hirschi and Gottfredson 1983), so one might hypothesize that the man's age is more relevant to the risk of violence against wives than the woman's. But although the Canadian uxoricide data indicate that risk is indeed a decreasing function of the husband's age (Figure 1B), there is no indication that this relationship is stronger than that for the wife's age (Figure 1A). As for nonlethal violence, the survey data indicate a very similar age-related decline whether rates are computed relative to wife's age (Figure 1C) or husband's (Figure 1D).

In commonlaw unions (Figure 2), the rates of both lethal and nonlethal violence against wives are substantially higher at all ages than in registered unions (Figure 1). However, the age-related pattern of uxoricide risk is markedly different: in commonlaw unions, middle-aged wives incur the greatest risk (Figure 2A). This pattern is not replicated in the Violence Against Women Survey data on nonlethal assaults, however: here, the commonlaw age pattern looks very like that for registered unions, with risk declining monotonically (Figure 2C).

Again, one may ask whether the age patterns in commonlaw unions merely reflect the ages of husbands. Uxoricide rates do not show exactly the same pattern for age of husband as for age of wife, mainly because rates for men over 65 years of age increased rather than decreased (Figure 2B). In the case of

nonlethal assaults, the risk pattern in relation to the husband's age (Figure 2D) again parallels both that for the wife's age (Figure 2C) and the registered marriage data (Figure 1).

Figure 2
Comparison of age-specific rates of lethal and nonlethal assaults in commonlaw marriages. Uxoricides per million wives per annum as a function of wife's age (A) and husband's age (B) in Canada 1974-1992. Nonlethal assault rates per hundred wives per annum as a function of wife's age (C) and husband's age (D) in Canada 1993.



*Unreliable estimate because of small sample size.

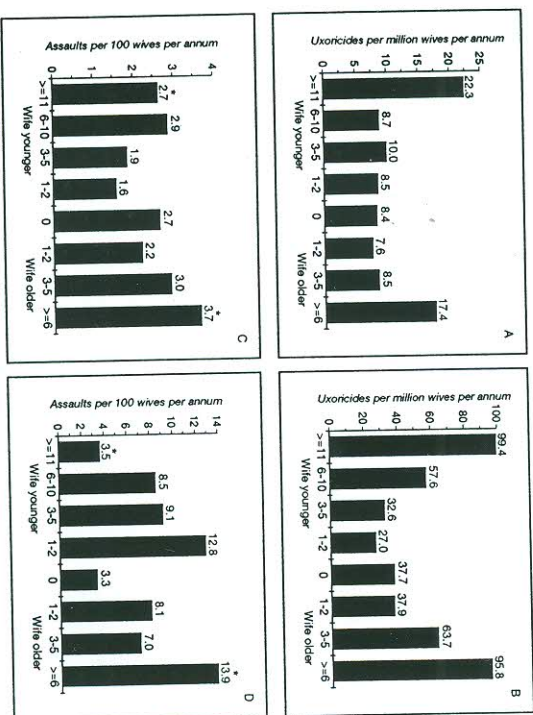
Age disparity

"May-December marriages" are remarkably prevalent among spousal homicides (Daly and Wilson 1988b), but the possible relevance of age disparity to marital solidarity and conflict is virtually unstudied. In Canada, between 1974 and 1992, 12.5% of uxoricidal husbands were more than 10 years older than their wives, in contrast to just 5.2% of Canadian coresiding husbands in the 1981 census and 5.3% in the 1991 census. The wife was six years or more older than the husband in 7.5% of the uxoricides, in contrast to 2.4% of all coresiding Canadian wives in the 1981 census and 2.8% in the 1991 census.

Figures 3A and 3B show that uxoricide risk is a U-shaped function of age disparity, both in registered marital unions and in commonlaw unions. (For similar patterns in earlier subsets

of these data, see Daly and Wilson 1988b; Wilson, Daly, and Wright 1993). A similar pattern has been shown in the United States (Mercy and Saltzman 1989).

Figure 3
Comparison of age-disparity-specific rates of lethal and nonlethal assaults by husbands against wives in registered and commonlaw unions. Uxoricides per million couples per annum in registered unions (A) and commonlaw unions (B) in Canada 1974-1992. Nonlethal assault rates per hundred couples per annum in registered unions (C) and commonlaw unions (D) in Canada 1993.



*Unreliable estimate because of small sample size.

Surprisingly, there is little or no evidence of a comparable effect of age disparity in nonlethal violence in either registered or commonlaw unions, according to the 1993 survey (Figures 3C and 3D). For survey respondents, the husband was more than 10 years older in 4.9% of the 8,385 coresiding couples (and 5% for the weighted estimate for all Canadian couples versus 5.3% according to the 1991 census), whereas such a disparity characterized 5% of those 277 couples (6% for the weighted estimate) in which the husband had been violent toward his wife within the past year.

Are demographic risk markers merely correlates of household income?

As noted above, poverty is evidently an important risk factor for violence against wives. Young couples are poorer than older couples and commonlaw unions are poorer than registered

unions, both in the Canadian population-at-large (Norland 1985) and in the sample of women responding to the 1993 Violence Against Women Survey. Thus, one might hypothesize that socioeconomic status is of primary importance, and that patterns of risk as a function of age and type of union merely reflect disadvantaged economic circumstance.

Table 4
Estimated average household income, in thousands of dollars, in relation to violence in the marriage and demographic risk markers.

	Violence in past year	Violence before past year	No violence	All women in marital unions
Overall	\$45.4 (254)	\$48.3 (970)	\$48.9 (6068)	\$48.7 (7338)
Type of union				
Registered	50.2 (166)	49.1 (879)	49.1 (5330)	49.1 (6419)
Commonlaw	36.1 (88)	40.9 (91)	47.3 (738)	45.8 (919)
Age of wife				
18-24	29.1 (46)	32.3 (31)	37.6 (339)	36.4 (418)
25-34	43.8 (103)	46.5 (282)	49.1 (1759)	48.5 (2154)
35-44	54.8 (71)	55.5 (326)	55.6 (1856)	55.5 (2266)
≥ 45	51.8 (34)	45.5 (331)	45.5 (2114)	45.5 (2500)
Age difference				
Husband ≥ 11 years older	58.8 (8)*	47.4 (50)	43.7 (262)	44.7 (321)
Husband 6-10 years older	53.8 (40)	46.9 (126)	46.0 (855)	47.1 (1028)
Husband 3-5 years older	40.3 (57)	46.8 (253)	47.8 (1455)	47.4 (1776)
Husband 1-2 years older	44.4 (61)	50.2 (267)	50.7 (1631)	50.5 (1970)
Same age	55.3 (32)	49.1 (110)	51.1 (739)	50.9 (886)
Wife 1-2 years older	42.2 (25)	51.4 (100)	50.4 (670)	50.1 (803)
Wife 3-5 years older	30.7 (20)	45.0 (41)	47.2 (320)	46.3 (384)
Wife ≥ 6 years older	34.7 (11)*	41.6 (23)	46.7 (136)	45.2 (170)

*Unreliable estimate because of small sample size.

Numbers in parentheses represent the numbers of women in corresponding survey categories. Source: Violence Against Women Survey, Statistics Canada, 1993

This hypothesis gains little support from further analyses of the Survey responses. Table 4 presents the weighted estimated average household incomes for women who did or did not report violence in the present relationship, both for the sample as a whole and for various demographic breakdowns thereof. In general, those who reported violence indeed tended to have somewhat lower incomes than those who did not, and those who had experienced violence within the last year tended to have somewhat lower incomes than those who had experienced violence only in the more distant past. However, these economic differences between assaulted and other wives are not large across the sample as a whole, and are characteristic of commonlaw but not registered marriages and of younger but not older wives.

Attempts to limit autonomy

As noted earlier, interviewees' affirmations of "autonomy-limiting behaviour" by their husbands were associated with reports of violent acts (Tables 1 and 2). Furthermore, the autonomy-limiting index was much higher for wives who reported recent violence (within the past year) than for those who reported only previous violence (more than a year ago) in that relationship (Table 5). These results further support the hypothesis of psychological links between men's efforts to control and monopolize their wives and violence against wives.

We have proposed that violence against wives varies in relation to demographic and situational variables which reflect potential threats to men's exclusive marital entitlements. If, for example, registration of marriage provides a cue of a wife's commitment and/or of social recognition of the union, then men's sexually proprietary concerns are likely to be less frequently or less intensely aroused in registered marriage than in commonlaw marriage. We therefore anticipated that autonomy-limiting behaviour would vary in relation to the demographic variables, in much the same ways as reported violence varies.

Table 5 summarizes variation in the autonomy-limiting index in relation to reports of violence and the demographic variables analyzed above. There are two main conclusions. First, within each demographic category, the mean index value was highest for those women who reported violence in the past year, intermediate for those who reported violence by current husbands prior to the past year, and lowest by far for women who had not experienced violence in the present relationship. Secondly, within

each of the three groups of women categorized according to their experience of violence, the autonomy-limiting index varies relatively little between demographic categories. However, these index values do vary in relation to age, age disparity, and type of union within the total sample of wives, and the patterns of variation are consistent with those for violence (Table 3 and Figures 1-3).

Table 5

Average values of the autonomy-limiting index for coresiding wives in relation to violence in the marriage and demographic risk markers.

	Violence in past year	Violence before past year	No violence	All women in marital unions
Overall	1.59 (277)	0.82 (1041)	0.17 (6990)	0.30 (8385)
Type of marital union				
Registered	1.51 (178)	0.81 (944)	0.16 (6171)	0.28 (7363)
Commonlaw	1.53 (99)	0.85 (97)	0.21 (819)	0.41 (1022)
Age of wife				
18-24	1.64 (54)	0.68 (34)	0.22 (381)	0.41 (471)
25-34	1.55 (106)	0.86 (294)	0.18 (1897)	0.33 (2309)
35-44	1.50 (77)	0.62 (348)	0.16 (2064)	0.26 (2509)
≥ 45	1.36 (40)	0.93 (365)	0.16 (2648)	0.28 (3096)
Age difference				
Husband ≥ 11 years older	1.66 (10)*	1.21 (54)	0.32 (303)	0.46 (368)
Husband 6-10 years older	1.20 (43)	0.84 (142)	0.18 (996)	0.30 (1191)
Husband 3-5 years older	1.66 (60)	0.92 (276)	0.16 (1691)	0.31 (2044)
Husband 1-2 years older	1.45 (66)	0.76 (284)	0.15 (1839)	0.26 (2209)
Same Age	1.28 (32)	0.79 (114)	0.19 (844)	0.28 (1000)
Wife 1-2 years older	1.86 (31)	0.54 (106)	0.13 (779)	0.26 (928)
Wife 3-5 years older	1.70 (23)	0.66 (42)	0.13 (373)	0.32 (444)
Wife ≥ 6 years older	1.64 (12)*	1.08 (23)	0.23 (165)	0.38 (201)

* Unreliable estimate because of small sample size.

Numbers in parentheses represent the numbers of women in corresponding survey categories. Source: Violence Against Women Survey. Statistics Canada, 1993

In addition to consideration of these demographic factors, household income may also be relevant to variations in the autonomy-limiting index values. A man's poverty, all else being equal, reduces his attractiveness as a marital partner and co-parent; chronic economic failure increases the probability of divorce and reduces the probability of remarrying. If control and demigration of a wife are effective in deterring her personal autonomy and if economically disadvantaged husbands are at risk of marital desertion, then efforts to limit a wife's autonomy may occur. A logistic regression analysis in which the dependent variable was affirmation of one or more autonomy-limiting items revealed that low household income was the strongest predictor ($p < .0001$), with additional significant effects of wife's youth ($p = .0007$), commonlaw as opposed to registered marital union ($p = .0069$), and absolute age disparity ($p = .0124$).

An additional logistic regression was conducted to assess predictors of the distinction between marriages in which violence had occurred in the past year and those in which it had not, with the autonomy-limiting index treated as an independent variable. Autonomy-limiting behaviour, wife's youth, and commonlaw status each made highly significant ($p < .0001$) separate contributions to the prediction of violence within the past year, whereas age disparity and household income made no further significant contributions to prediction. The fact that household income is a highly significant predictor of autonomy-limiting behaviour but not of past violence is puzzling, since violence and autonomy-limiting behaviour were themselves significantly associated. Autonomy-limiting efforts may actually be more strongly affected by socioeconomic status than is violence, but it may also be the case that there are differential income-related biases in the interpretation or divulgence of these two sorts of experiences.

The autonomy-limiting index was by far the best predictor (i.e., the strongest correlate) of the violence, but its treatment as an independent variable in this analysis does not of course suggest that it is causally implicated in the occurrence of violence. Instead, we interpret these correlated affirmations of the autonomy-limiting behaviours and of violence as parallel manifestations of certain husbands' efforts to exert coercive control.

Conclusions

The uxoricides reported in this paper represent 11.4% of all homicide victims in Canada in 1974-1992. In 1992, 88 wives were slain (and 75 per annum on average over the 19-year period). Extrapolating from the 1993 Violence Against Women Survey, it is estimated that some 198,000 Canadian women experienced some form of physical violence or threat of violence from a coresiding male partner within the preceding year. Thus, for each Canadian wife slain by her husband in a recent year, about 2,250 evidently experienced violence of the sort disclosed by Survey respondents.

We anticipated that lethal and nonlethal violence would exhibit parallel patterns of risk in relation to demographic factors, and this expectation was largely, but not entirely, upheld. In particular:

1. Wives incurred much greater risk of both lethal and nonlethal violence in commonlaw marital unions than in registered unions.
2. In registered unions, the risks of lethal and nonlethal violence declined in similar fashion in relation to the wife's age. In commonlaw unions, however, uxoricide risk increased until middle-age, whereas the rate of nonlethal violence declined in much the same ways as in registered unions. Ages of husbands and wives are of course highly correlated, impeding assessment of their possible separate relevances to risk.
3. Uxoricide rates increased sharply as the age disparity of marital partners increased, in both registered and commonlaw unions, but there was no apparent relationship between age disparity and rates of nonlethal violence.

It is not obvious why lethal and nonlethal violence exhibit such different patterns of risk in relation to age disparity and, in commonlaw unions, in relation to wife's age. One possibility is that certain rare risk factors for very severe violence are relatively prevalent in age-disparate couples and older commonlaw couples, engendering relatively high uxoricide rates, but that these marriage types and these hypothetical risk factors are too rare to have been tapped in the Violence Against Women Survey.

Another possibility is that uxoricides in age-disparate and older commonlaw couples are disproportionately of some distinct variety that is motivationally unrelated to nonlethal assault. This possibility would gain support if a history of nonlethal violence were less characteristic of uxoricides in age-disparate and older commonlaw couples than of other uxoricides, but information about past violence has been included in the Homicide Survey only since 1991, and its validity and utility have yet to be explored. (One reliably coded data element in the Homicide Survey would seem to speak against the hypothesis that uxoricides in age-disparate and older commonlaw couples are motivationally distinct: such homicides were neither more nor less likely to have been effectuated by beating or other hands-on means of assault than other uxoricides.)

Our results indicate that a woman's attributes, especially her age, are germane to her risk of victimization. However, this says more about the man's psychology and about his inclination to control and monopolize her than about the woman. Men do not assault their wives merely because the latter are handy targets when violent men happen to be frustrated or angry. If that were the case, then other equally available targets would be similarly at risk, but, in fact, a man is very much more likely to kill his wife than to kill any other member of his household (Daly and Wilson 1982).

It is a widespread view, which we endorse, that male sexual proprietariness is the main substantive issue behind violence against wives, whether fatal or not. Evidence in support of this interpretation is reviewed by Daly and Wilson (1988b) and by Wilson and Daly (1993a; 1993b). We suggest that violence and threats are best understood in terms of their coercive utility in maintaining uxorial proprietary claims. This interpretation gains support from the present study's finding that violence against wives and autonomy-limiting behaviours go hand in hand.

The strong relationship between the autonomy-limiting items and violence raises the question of whether the former might be literally predictive of the latter, that is, whether these autonomy-limiting behaviours might be danger signals in couples where no violence has yet occurred. Future research can also clarify whether such items might be predictive of escalated violence and lethal risk in couples with a history of violence. The discovery of some differences in demographic risk patterns in nonlethal and lethal violence may also hold some potential for predicting which

assaulted wives are especially in lethal danger. Until there is a reliable means to predict the risk of violence, we believe that the women themselves are the best judges even though they too may misjudge their danger.

Notes

1. We gratefully acknowledge the grant support for the homicide research from the Social Sciences and Humanities Research Council of Canada. For their roles in developing the Canadian Homicide Survey and facilitating our use thereof, we thank J. LaCroix, S. Desilva, J. Turner, C. Wright, and O. Fedorowycz of Statistics Canada. Population-at-large data on married couples were generously provided by J.A. Norland, B. Ram and P. Turcotte of Statistics Canada. We thank David Paton for his advice and assistance in our analysis of the Violence Against Women Survey data.
2. Still-married women who were not residing with their husbands at the time of the interview because of employment or other reasons were excluded.

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