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ORIGINAL PAPER

Intimate Partner Sexual Violence Among Canadian University Students: Incidence, Context, and Perpetrators' Perceptions

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Abstract

Men's sexual violence against women is pervasive and is commonly committed against young women by intimate partners. Limited research has examined occurrence rates of intimate partner sexual violence among university students separated by various tactics and sexual acts. Using surveys with convenience samples of 142 Canadian university women and 441 Canadian university men, we examined women's self-reported intimate partner sexual violence victimization and men's self-reported perpetration rates in their most recent heterosexual intimate relationship in the past year. We examined a detailed breakdown across different tactics (i.e., verbal coercion, intoxication, and threats of harm/physical force) and sexual acts (i.e., nonpenetrative sexual contact; oral, vaginal, and anal penetration). Thirty-three percent of women reported at least one victimization experience, and 16% of men reported at least one perpetration experience. The most common tactic reported was verbal coercion for both women's victimization and men's perpetration, and the most common sexual act reported was vaginal penetration for women's victimization and oral sex for men's perpetration. We also examined contextual features and perceptions of the effects of perpetrators' most memorable incidents. These most memorable incidents often occurred either in their own or their partner's home and involved alcohol consumption. Most men reported no significant effects of their sexual violence on their relationships and sometimes normalized their behavior. We briefly discuss the implications of our results for future research and interventions.

Keywords Intimate partner violence · Sexual violence · Sexual assault · Sexual coercion · Sex offenses

Introduction

Intimate partner sexual violence (IPSV) exists at the intersection of intimate partner violence and sexual violence. Because the research on these two topic areas has developed largely independently, IPSV is often overlooked (Bagwell-Gray et al., 2015; Logan et al., 2015). In the intimate partner violence literature, sexual violence is examined mainly in the context of otherwise violent relationships and has received little attention compared to physical and psychological partner abuse (Logan et al., 2015; Moreau et al., 2015). In the general sexual violence literature, sexual violence is examined regardless of the victim–perpetrator relationship (Logan et al., 2015). This literature has often broken down sexual violence rates by the relationship between the victim and perpetrator (e.g., strangers, acquaintances, and intimate partners) and has provided mounting evidence that a substantial proportion of sexual violence is perpetrated by intimate partners (e.g., Smith et al., 2017). However, fewer studies have examined the occurrence of sexual violence specifically among women and men in intimate relationships. Those that have examined sexual violence in this particular relational context have examined mostly overall occurrence rates in national and convenience samples with little to no breakdown across different tactics and sexual acts. As a result of these gaps, we do not yet know the "full extent of the nature and scope of [IPSV]" (Logan et al., 2015, p. 112), especially among university students.

Sexual Violence Occurrence Rates and Contexts

While not all researchers have made a clear distinction, we label previous rates of lifetime or since age 14 sexual violence as "prevalence" and rates of new occurrences during

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a specified time period (e.g., past year or month) as "incidence."[1] We use the term "occurrence" to refer more broadly to either type of rate. Occurrence rates vary depending on the timeframe and type of sexual violence; however, research has consistently found significantly higher perpetration rates among men and higher victimization rates among women (Burczycka, 2020; Sutherland et al., 2014; VanderLaan & Vasey, 2009). Given this gendered nature of sexual violence, we focus only on women's victimization and men's perpetration.

Sexual violence is most commonly committed against young women under age 25 (Brennan & Taylor-Butts, 2008; Conroy & Cotter, 2017), making university students an important group to focus on. Most university sample research has examined women's self-reported victimization. National studies of U.S. university women have found that about 43 to 54% reported having experienced some form of sexual violence by someone ever or since age 14 (Koss et al., 1987; Sutherland et al., 2014). Based on their review of past research using large, representative samples of US undergraduate women, Muehlenhard et al. (2017) concluded that, although risk varies depending on campus, year in school, race, and so on, "one in five (20%) is a reasonable estimate of the percentage of [U.S.] undergraduate women sexually assaulted while in college" (p. 566).[2] Comparatively fewer studies have examined university men's self-reported perpetration. Studies using large, representative samples of US university men have found that about 15 to 25% reported having committed some form of sexual violence against someone ever or since age 14 (Koss et al., 1987; Sutherland et al., 2014).

National U.S. studies with both university and general samples have consistently found that a substantial proportion of the sexual violence that women experience is perpetrated by intimate partners (Krebs et al., 2007, 2016). The most recent U.S. national prevalence rates suggest that 16.4% of U.S. women have experienced sexual violence by an intimate partner during their lifetime (Smith et al., 2017). Similarly, 45.1% of U.S. women victims of sexual violence reported that the perpetrator was a current or former intimate partner (Smith et al., 2017). Research has also found that more than half of university men's self-reported sexual violence perpetration occurred within a steady or casual dating relationship (Abbey et al., 1998; Gidycz et al., 2007, 2011). While most of these studies with university men combined steady and casual dating relationships or did not clearly define dating relationships, subsequent research (albeit with a community sample) found that more perpetrators were in a committed relationship with the victim compared to a casual one (Wegner et al., 2014).

Sexual Violence in Intimate Relationships

Limited research has measured sexual violence specifically among women and men in intimate relationships (e.g., in relationship at least one or three months, in committed and sexual relationship, or living together and parenting a child; Brousseau et al., 2011; Goetz & Shackelford, 2009; Rapoza & Drake, 2009; Salwen & O'Leary, 2013; Starratt et al., 2008). Only two of these studies were specific to university students and found that roughly 31% of women reported being victimized by their current partner and 27 to 36% of men reported perpetrating against their current partner (Brousseau et al., 2011; Rapoza & Drake, 2009).[3] The only Canadian national representative study to have examined sexual violence in university dating relationships, to our knowledge, found that 28% of women reported having experienced sexual violence from a dating partner in the past year and 11% of men reported having perpetrated (DeKeseredy & Kelly, 1993).

Even more limited is research that has looked at the specifics of what sexual violence looks like in university students' intimate relationships. Brousseau et al. (2011) and DeKeseredy and Kelly (1993) conducted the only studies to our knowledge to have examined different categories of IPSV (rather than just overall occurrence rates) among university students. These studies found that, according to victimization and perpetration reports, nonpenetrative sexual contact and intercourse because of verbal pressure and arguments were the most common experiences and rape and attempted rape (penetration obtained by taking advantage of a person's intoxication, threats, or physical force) were less common. However, we do not yet know the rates for each tactic independent of the sexual act and vice versa, or for each combination of tactic and sexual act. Although Brousseau et al. extended earlier research by modifying the original Sexual Experiences Survey (Koss et al., 1987; Koss & Oros, 1982) to measure oral and anal sexual violence separately, they only reported the rates that occurred through threats and physical force: 0.5% of women victims and 0.5% of men perpetrators reported each.

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[1] Since age 14 is a common timeframe in the sexual violence literature and is meant to distinguish adolescent and adulthood experiences from childhood experiences (Koss et al., 2007).

[2] This review included only studies that defined sexual assault as including sexual acts obtained by force, threats of force, or incapacitation (not verbal or psychological coercion).

[3] Both studies included both members of each couple in their sample. In Brousseau et al. (2011), only one member of each couple was required to be a university student. In Rapoza and Drake (2009), most participants were students.

Contextual Features of Sexual Violence Incidents

Contextual features of sexual violence incidents, such as alcohol use and location, are important for understanding risk. According to both victim and perpetrator reports, alcohol use is quite common (Abbey et al., 1998, 2001; Krebs et al., 2007, 2016; Lyndon et al., 2007). At least one-third of university men's most serious reported sexual assaults involved alcohol consumption, most commonly by both victim and perpetrator (Abbey et al., 1998, 2001; Lyndon et al., 2007). However, one national U.S. study found that alcohol was present in only 9% of reported IPSV incidents in the National Incident-Based Reporting System (which includes cases reported to the FBI by participating agencies; Krienert & Walsh, 2018). Sexual violence among university students most commonly occurs in a home or dorm room, often of the victim or perpetrator (Abbey et al., 1998, 2001; Krebs et al., 2007). Over two-thirds of university men's most serious sexual violence was committed in the home of either the perpetrator or victim (Abbey et al., 1998, 2001). Krienert and Walsh (2018) found that 82% of IPSV incidents occurred in the victim's residence, many likely representing a residence shared with the perpetrator given the inclusion of many married victims. With the exception of Krienert and Walsh (2018), most of this research has not been specific to *intimate partner* sexual violence.

Men's Perceptions of Sexual Violence

Men often do not rate scenarios as constituting sexual violence or assault and often (and to a greater degree than women) exonerate perpetrators and assign at least some guilt or blame to victims (Grubb & Harrower, 2009; Munsch & Willer, 2012; Russell et al., 2011). This past research has relied predominantly on participants' interpretations of vignettes depicting sexual violence scenarios rather than men's actual experiences. It also has not specifically examined men's perceptions of the effects of their own IPSV. Abbey and McAuslan (2004) did use open-ended survey questions to examine how university men felt about their most severe sexual violence perpetration (not specific to intimate relationships) and in what ways their perceptions of the incident changed since it happened. They found that some felt remorse and learned from the experience (past assaulters more so than repeat assaulters).

Current Research

We contribute to the limited research on university women and men's self-reported occurrence rates of IPSV. We report on two studies. In the first study, we examined university women's IPSV victimization incidence rates in their most recent heterosexual intimate relationship in the past year. In the second study, we examined university men's IPSV perpetration incidence rates in their most recent heterosexual intimate relationship in the past year. Both studies were designed as pieces of larger programs of research and were meant, in part, to screen women and men with IPSV experiences to participate in qualitative interviews (see Jeffrey & Barata, 2017, 2019). By examining a more detailed breakdown across different tactics (i.e., verbal coercion, taking advantage of an intoxicated partner, and threats of harm/physical force) and sexual acts (i.e., nonpenetrative sexual contact; oral, vaginal, and anal penetration) compared to past research, we provide a more in-depth understanding of the scope and nature of university students' IPSV experiences. Our research also provides incidence rates from both the victim and perpetrator perspective. Both perspectives together allow for stronger conclusions about the scope and nature of university students' IPSV and may highlight important differences in victimization and perpetration experiences or reports. We also contribute to the literature on contextual features (i.e., location, alcohol use) of IPSV and perpetrators' perceptions of the effects of their sexual violence, which very little research has examined to date in the specific context of intimate relationships. Although our sample may not represent all Canadian university students' experiences, this research is an important step in understanding with greater precision what university students' IPSV looks like.

Study 1: Women's Intimate Partner Sexual Violence Victimization

Method

Participants

We received a total of 160 surveys. We deleted the surveys of participants who declined to participate on the consent form or withdrew, as well as repeats, surveys with no responses, and surveys of ineligible participants. Although the original study did not have an age restriction, we removed those who were not 18 to 24 for the current analysis so that women were the same age as men in Study 2 (which did include an age restriction; total of 8 removed). Finally, we removed one participant who was missing more than 15% of responses to the main survey scale—the Sexual Experiences Survey (similar cutoffs have been used previously; Anderson et al., 2017; Buday & Peterson, 2015). We were left with a final sample of 142 women.

Participants were aged 18 to 24 ($M = 19.4$; SD = 1.5). Most identified as heterosexual or straight (87.3%) and as White/European (78.9%). Most were first-year (47.2%) and second-year (20.4%) students. Most (97.2%) reported being in an exclusive, committed intimate/romantic relationship with their most recent partner (2.1% reported being engaged to their most recent partner and 0.7% reported being married). Most (86.6%) reported that they were not living with this partner. Participants reported having been in a relationship with their most recent partner for 3 to 62 months (*M* = 18.5; SD = 14.3). Many (62.0%) reported that they were still in a relationship with their most recent partner at the time of the survey; 36.6% reported that they were no longer in a relationship and 1.4% either did not respond or reported "other." A majority of participants reported having engaged in kissing (98.6%), sexual touching (93.7%), oral sex (85.2%), and vaginal sex (80.3%) with their partner, with fewer reporting anal sex (14.1%).

Procedure

Upon approval by an institutional research ethics board, we recruited a convenience sample of Canadian university women between October 2013 and January 2014 to complete an online survey through the Psychology Department Participant Pool and advertisements posted around campus. We advertised the study as pertaining to "women's intimate experiences in dating relationships with men," including "sexual experiences that may have been unwanted or distressing." Participants must have identified as women and their most recent dating relationship must have: (1) been with a man, (2) been exclusive/monogamous, (3) occurred at least partially within the past year, and (4) lasted at least 3 months. After viewing a consent form, agreeing to participate, and self-identifying as meeting the eligibility criteria, participants were directed to the survey. Instructions twice reminded participants to answer relationship and sexual violence questions only about their most recent past or present relationship that met the criteria noted above. Those who participated through the Psychology Department Participant Pool (*n* = 89) received 0.5 bonus grade toward an eligible Psychology course and those who responded via email to our advertisements posted around campus (*n* = 53) received a $5 electronic gift card.

Measures

The survey included: (1) background questions about age, sexual orientation, ethnicity, university information, and sexual and dating history and (2) the Sexual Experiences Survey-Short Form Victimization (SES-SFV; Koss et al., 2007). The SES-SFV contains seven root items describing sexual acts that the respondent may have experienced without consent (nonpenetrative sexual contact; attempted and completed oral, vaginal, and anal penetration). Each root item was followed by five possible tactics that may have been used against the respondent to obtain the sexual act (verbal coercion, taking advantage of intoxication, threats of harm, and physical force). Participants use a 4-point scale (0 to 3+) to indicate how many times each tactic was used to obtain each sexual act in the past year. The SES-SFV measures sexual acts committed by "someone" and "a man." Because we were not given permission by the SES authors to make wording changes, we added bolded instructions to the beginning of the scale asking participants to answer only about the same relationship/partner that they answered the previous survey questions about (i.e., their most recent past or present relationship that was with a man, exclusive/monogamous, occurred at least partially within the past year, and lasted at least 3 months). Our relationship eligibility criteria meant that some (i.e., those who had broken up with their partner within the past year and those who started dating their partner within the past year) would have been responding to the SES about less than a full past year.

The SES is the most widely used measure of sexual victimization and respondents do not find it to be overly distressing (Davis et al., 2014; Edwards et al., 2009; Johnson et al., 2012; Logan et al., 2015). The SES-SFV has been found to have adequate two-week test–retest reliability and good predictive validity and to demonstrate comparable results when used in-person and online (Johnson et al., 2017). We do not include a Cronbach's alpha score because it is an inappropriate reliability assessment for the SES (Canan et al., 2020; Koss et al., 2007).

There are many ways to score the SES (see Davis et al., 2014; Koss et al., 2007). Because we were most interested in understanding rates of different types of IPSV, we opted to separate both tactics and sexual acts. We also report rates for each combination of tactic and sexual act and, to allow for comparability across other studies, we provide rates of the categories recommended by Koss et al. (2007, 2008; see Table 2).

Data Analysis

We analyzed descriptive statistics of the background and SES questions using Microsoft Excel. We calculated all incidence rates based on the number of participants who responded positively (i.e., reported one or more incidents) to one or more of the relevant SES items. We treated missing values on the SES as nonendorsement of IPSV (i.e., the modal value of 0; Anderson et al., 2017; Strang & Peterson, 2013); 49 participants were missing values on the SES, but all completed at least 85%. As noted above, we removed one participant from the original sample who was missing more than 15% of responses on the SES (Anderson et al., 2017; Buday & Peterson, 2015). We report incidence rates as percentages of victims in the sample and percentages of the total sample.

Table 1 Incidence of women's intimate partner sexual violence victimization in the past year

Sexual act	Tactic			
	Verbal coercion	Intoxication	Physical force[b]	Total (any tactic)
Sexual contact				
No. SES-SFV items	2	1	2	5
n	13	15	3	24
% of total *n* (142)	9.2	10.6	2.1	16.9
% of victims (47)	27.7	31.9	6.4	51.1
Oral sex[a]				
No. SES-SFV items	4	2	4	10
n	18	11	2	24
% of total *n* (142)	12.7	7.7	1.4	16.9
% of victims (47)	38.3	23.4	4.3	51.1
Vaginal penetration[a]				
No. SES-SFV items	4	2	4	10
n	14	12	4	24
% of total *n* (142)	9.9	8.5	2.8	18.3
% of victims (47)	29.8	25.5	8.5	55.3
Anal penetration[a]				
No. SES-SFV items	4	2	4	10
n	3	4	3	10
% of total *n* (142)	2.1	2.8	2.1	7.0
% of victims (47)	6.4	8.5	6.4	21.3
Total (any sexual act)				
No. SES-SFV items	14	7	14	35
n	31	22	9	47
% of total *n* (142)	21.8	15.5	6.3	33.10
% of victims (47)	66.0	46.8	19.1	–

[a] Attempted or completed

[b] Threatened harm or actual physical force

Results

Intimate Partner Sexual Violence Victimization

Forty-seven (33.1%) participants reported at least one experience with IPSV in their most recent heterosexual relationship in the past year.[4] The most common tactic was verbal coercion, followed by use of intoxication, and then threats of harm or physical force (see Table 1). Thirteen (27.7% of victims, 9.6% of sample) reported having experienced more than one type of tactic. The most common sexual act was vaginal penetration, followed by nonpenetrative sexual contact and oral sex, and then anal penetration. Of the SES victim categories, sexual contact was the most common, followed by attempted coercion, attempted rape, rape, and coercion (see Table 2).

Study 2: Men's Intimate Partner Sexual Violence Perpetration

Method

Participants

We received a total of 597 surveys. We deleted the surveys of participants who declined to participate on the consent form or withdrew, as well as repeats, surveys with no responses, and surveys of ineligible participants.[5] We were left with a final sample of 441 men.

Participants were aged 18 to 24 ($M = 19.0$; SD = 1.3). Most identified as heterosexual, straight, or attracted to women (74.4%; many others responded "male") and as White/European (78.0%). Most were first-year (66.7%)

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[4] This overall rate was first reported in Jeffrey and Barata (2017) to describe the sample from which we recruited women to participate in interviews. The result reported there was slightly different because our data cleaning process was more stringent in the current study since our main purpose was to report IPSV incidence rates.

[5] We removed all surveys of 23 participants who had first indicated on the eligibility page that they were ineligible and then accessed the survey a second (or third) time, this time indicating that they were eligible and completing the survey.

Table 2 Incidence of women's intimate partner sexual violence victimization in the past year using SES-SFV categories

Victim category	No. SES-SFV items	*n*	% of total *n* (142)	% of victims (47)
Non-victim	–	95	66.9	–
Sexual contact (nonpenetrative sexual contact through verbal pressure, taking advantage when intoxicated, threats of harm, or physical force)	5	24	16.9	51.1
Attempted coercion (attempted oral, vaginal, or anal penetration through verbal pressure)	6	20	14.1	42.6
Coercion (oral, vaginal, or anal penetration through verbal pressure)	6	13	9.2	27.7
Attempted rape (attempted oral, vaginal, or anal penetration through taking advantage when intoxicated, threats of harm, or physical force)	9	16	11.3	34.0
Rape (oral, vaginal, or anal penetration through taking advantage when intoxicated, threats of harm, or physical force)	9	14	9.9	29.8

and second-year (21.1%) students. All participants reported being in an exclusive, committed intimate/romantic relationship with their most recent partner (none reported that they were married or engaged). Most (93.9%) reported that they were not living with this partner. Participants reported having been in a relationship with their most recent partner for 3 to 120 months ($M = 14.9$; SD = 14.3). Fifty-eight percent reported that they were no longer in a relationship with their most recent partner at the time of the survey; 40.8% reported that they were still in a relationship and 1.1% reported "other." A majority of participants reported having engaged in kissing (95.0%), sexual touching (91.4%), oral sex (82.5%), and vaginal sex (79.1%) with their partner, with fewer reporting anal sex (13.4%).

Procedure

Upon approval by an institutional research ethics board, we recruited a convenience sample of Canadian university men (from the same university as Study 1) between September 2016 and October 2017 to complete an online survey through the Psychology Department Participant Pool and advertisements posted around campus. We advertised the study as pertaining to "men's experiences in dating relationships with women," including "sexual behavior that [they] may have engaged in without consent." Participants must have identified as men, been aged 18 to 24, and their most recent dating relationship must have: (1) been with a woman, (2) been exclusive/monogamous, (3) occurred at least partially within the past year, and (4) lasted at least 3 months. After viewing a consent form, agreeing to participate, and self-identifying as meeting the eligibility criteria, participants were directed to the main survey. Instructions twice reminded participants to answer relationship and sexual violence questions only about their most recent past or present relationship that met the criteria noted above. Participants who participated through the Psychology Department Participant Pool ($n = 409$) received 0.5 bonus grade toward an eligible Psychology course and participants who responded via email to our advertisements posted around campus ($n = 32$) were placed in one of two draws for a $40 electronic gift card.[6]

Measures

The survey included: (1) background questions about age, sexual orientation, ethnicity, university information, and sexual and dating history; (2) the Sexual Experiences Survey-Short Form Perpetration (SES-SFP; Koss et al., 2007); and (3) questions to assess contextual features of perpetrators' most memorable IPSV incident and their perceptions of the incident's effects. The SES-SFP is formatted in the same way as the victimization version but asks about acts that the respondent used against someone in the past year. In addition to adding instructions to the beginning of the SES to prompt men to think only about their most recent past or present relationship that met the eligibility criteria noted above, we also made minor wording changes to the SES items (i.e., "someone" and "a woman" changed to "my partner" and gender neutral pronouns changed to "she" and "her"; M. Koss, personal communication, July 2015). Our relationship eligibility criteria meant that some (i.e., those who had broken up with their partner within the past year and those who started dating their partner within the past year) would have been responding about less than a full past year. The SES-SFP has been found to have good two-week test–retest reliability and predictive validity, and to demonstrate comparable results when used in-person and online (Johnson et al., 2017).

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[6] We deleted participants' identifying information within several months of their participation (in order to help protect confidentiality). Although it is unlikely that men who completed the survey for credit completed it a second time for payment (or vice versa), we were unable to fully prevent this.

We asked those who reported any experiences on the SES to answer the following closed-ended follow-up questions (adapted from Abbey et al., 2001) about their most memorable experience: Where did the experience occur? How much alcohol did you consume during the experience or within one hour prior? and How much alcohol did your partner consume during the experience or within one hour prior? A final open-ended question stated: "Please describe, using the text box below, how this experience affected your relationship with your partner. If it did not affect it at all, please describe. Consider, for example, whether the experience affected: (1) your sexual relationship with her; (2) how you feel/felt about her or how she feels/felt about you; (3) how you and/or she feel(s)/felt about the relationship itself; (4) your commitment to her or hers to you."

Data Analysis

We analyzed descriptive statistics of the background, SES, and closed-ended contextual features questions using Microsoft Excel. We scored the SES-SFP in the same way as the SES-SFV in Study 1. Only 18 participants were missing values on the SES, and all completed at least 85%. Thus, we did not remove any participants for missing more than 15% of responses (Anderson et al., 2017; Buday & Peterson, 2015).

We conducted a quantitative content analysis (Krippendorff, 2004; Weber, 1990) on the final open-ended question that asked participants to describe how their most memorable experience affected their relationship with their partner. Of the 70 participants who reported some type of IPSV on the SES, 57 (81.4%) responded to the final open-ended question. (We excluded 45 participants who responded to the open-ended question but did not report any IPSV.)[7] To develop the initial coding scheme, the first author repeatedly read the data and used an inductive approach to identify the reported types of effects that participants' most memorable IPSV incident had. Together, both authors examined the data and refined the coding method and scheme. We defined the different types of effects according to the following five mutually exclusive categories: (1) positive effects (participant reported that there were positive effects of his IPSV on his relationship and/or on his partner); (2) negative effects (participant reported that there were negative effects of his IPSV on his relationship and/or on his partner); (3) no effects (participant reported that there were no effects of his IPSV on his relationship and/or on his partner); (4) effects on self (participant reported that there was any type of effect of his IPSV on himself); and (5) unclear/irrelevant (participant's response was unclear regarding effects of his IPSV on his relationship or partner or response was not relevant to the question). Positive and negative effects were sometimes based on our own interpretations; that is, not all participants explicitly labeled or described certain effects as positive or negative.

During this process, we also divided each participant's response every time they reported a new type of effect so that each segment could be coded separately (i.e., coding units; Krippendorff, 2004). Thus, the categories above were also mutually exclusive at the level of the coding unit, but a participant's complete response could have included multiple types of effects (e.g., positive and negative) and this was captured in our reporting of the results at the participant level. The complete, intact participant responses were still visible during the coding process to provide context (i.e., context units; Krippendorff, 2004); that is, sometimes it was necessary to see a full response to understand the meaning of one of its segments/coding units. Next, both authors independently coded the coding units into one of the five categories and then came to a final consensus by resolving disagreements. We then further clarified definitions and added examples to the coding scheme to maximize mutual exclusiveness of the five categories.

Below, we report frequencies of participants who reported each type of effect at least once based on our coding consensus. We report frequencies of our own (i.e., the authors') coding because we have a level of expertise about men's sexual violence that independent coders would not have and because we carefully discussed the data that were less clear. However, a second aim of this analysis was to test whether the coding scheme could reliably be used in the future. To this end, two undergraduate research assistants independently coded the pre-divided coding units using our coding scheme. Following Krippendorff (2004), we tested interrater reliability with this new set of coders who had not been intimately involved in developing the coding scheme and thus had not formed an implicit consensus or understanding of the codes that other researchers would not be able to replicate. We analyzed interrater reliability using Krippendorff's alpha in SPSS version 25 (using a macro developed by Hayes and Krippendorff; De Swert, 2012; Hayes & Krippendorff, 2007). Interrater reliability was good (Krippendorff's alpha = 0.90). Moreover, the research assistants' coding results were very similar to ours, with

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[7] Most of these 45 simply answered that this question was not applicable to them, but some answered as if some event had or had not impacted their relationship (possibly unreported IPSV).

Table 3 Incidence of men's intimate partner sexual violence perpetration in the past year

Sexual act	Tactic			
	Verbal coercion	Intoxication	Physical force[b]	Total (any tactic)
Sexual contact				
No. SES-SFP items	2	1	2	5
n	28	16	6	36
% of total *n* (441)	6.3	3.6	1.4	8.2
% of perpetrators (70)	40.0	22.9	8.6	51.4
Oral sex[a]				
No. SES-SFP items	4	2	4	10
n	30	16	12	44
% of total *n* (441)	6.8	3.6	2.7	10.0
% of perpetrators (70)	42.9	22.9	17.1	62.9
Vaginal penetration[a]				
No. SES-SFP items	4	2	4	10
n	21	13	7	32
% of total *n* (441)	4.8	2.9	1.6	7.3
% of perpetrators (70)	30.0	18.6	10.0	45.7
Anal penetration[a]				
No. SES-SFP items	4	2	4	10
n	6	10	5	13
% of total *n* (441)	1.4	2.3	1.1	2.9
% of perpetrators (70)	8.6	14.3	7.1	18.6
Total (any sexual act)				
No. SES-SFP items	14	7	14	35
n	51	26	14	70
% of total *n* (441)	11.6	5.9	3.2	15.9
% of perpetrators (70)	72.9	37.1	20.0	–

[a] Attempted or completed

[b] Threatened harm or actual physical force

only 14% of the coding units coded differently from our results by one or both of the research assistants.

Results

Intimate Partner Sexual Violence Perpetration

Seventy (15.9%) participants reported at least one instance of perpetrating IPSV in their most recent heterosexual relationship in the past year. The most common tactic was verbal coercion, followed by use of intoxication, and then threats of harm or physical force (see Table 3). Sixteen (22.9% of perpetrators, 3.6% of sample) reported having used more than one type of tactic. The most common sexual act was oral sex, followed by nonpenetrative sexual contact, vaginal penetration, and anal penetration. Of the SES perpetrator categories, sexual contact was the most common, followed by attempted coercion, attempted rape, rape, and coercion (see Table 4).

Contextual Features of Perpetrators' Most Memorable Incident

The vast majority of perpetrators reported that the most memorable IPSV incident occurred either in their own home or dorm room (45.7%) or in their partner's home or dorm room (31.4%). Others reported that it occurred in a car (7.1%), in a bar or at a party (not including at their own or their partner's home/dorm; 4.3%), at a hotel/motel (2.9%), or outside (1.4%); the remainder did not respond (7.1%). More than half of perpetrators reported that the most memorable event involved alcohol consumption by the perpetrator (55.7%) or victim (52.9%), and usually both (50.0%). Of those 39 who reported that they had consumed alcohol, 30.8% reported 1 to 2 drinks, 23.1% reported 3 to 4, 20.5% reported 5 to 6, and 25.6% reported 7 or more. Of those 37 who reported that their partner had consumed alcohol, 37.8% reported 1 to 2 drinks, 27.0% reported 3 to 4, 24.3% reported 5 to 6, and 10.8% reported 7 or more.

Table 4 Incidence of men's intimate partner sexual violence perpetration in the past year using SES-SFP categories

Perpetrator category	No. SES-SFP items	*n*	% of total *n* (441)	% of perpetrators (70)
Non-perpetrator	–	371	84.1	–
Sexual contact (nonpenetrative sexual contact through verbal pressure, taking advantage when intoxicated, threats of harm, or physical force)	5	36	8.2	51.4
Attempted coercion (attempted oral, vaginal, or anal penetration through verbal pressure)	6	34	7.7	48.6
Coercion (oral, vaginal, or anal penetration through verbal pressure)	6	15	3.4	21.4
Attempted rape (attempted oral, vaginal, or anal penetration through taking advantage when intoxicated, threats of harm, or physical force)	9	22	5.0	31.4
Rape (oral, vaginal, or anal penetration through taking advantage when intoxicated, threats of harm, or physical force)	9	20	4.5	28.6

Perpetrators' Perceptions of the Effects of the Most Memorable Incident

Of the 57 perpetrators who responded to the question about the effects of the most memorable incident, almost 60% made at least one statement explicitly reporting that the incident had no effects on their relationship and/or their partner or that their relationship went on as usual or did not change. Others reported negative or positive effects on their relationship and/or partner, or effects on themselves. See Table 5 for percentages, examples, and illustrative quotes. Many reported multiple types of effects. Some reported a negative effect on one part of their relationship but a positive effect on another part; for example: "Our sexual relationship had a break… improved ability to talk things through." Others reported that the incident did not affect their relationship but then went on to describe a positive or negative effect; for example: "I don't think it affected any of…these things listed. We just realized that we should not take advantage of one another when we have had too many drinks." Perceived effects (both within and across our five coding categories) may have varied depending on tactic and sexual act, but we did not examine these differences in the current analysis. Although 32 participants provided responses that were unclear or irrelevant with respect to effects on their relationships or partners (the purpose of our content analysis), it is worth noting that many of these responses worked to minimize and normalize IPSV (as did explicitly reporting no effects). For example, they: (1) explicitly minimized ("not serious," "not a crime," "not THAT big of a problem" [emphasis original]); (2) blamed their partner ("she was stubborn"); (3) claimed not to remember the incident; and (4) contrasted to more extreme violence ("It was gentle urging. Not full physical force.").

Discussion

Previous work has established high rates of sexual violence on contemporary university campuses and that a substantial proportion of this violence is perpetrated by intimate partners. We add to the limited existing research measuring the occurrence of sexual violence specifically among university students in intimate relationships (Brousseau et al., 2011; DeKeseredy & Kelly, 1993; Rapoza & Drake, 2009). One-third of the women in our sample reported at least one victimization experience in their most recent heterosexual relationship in the past year. This was roughly double the rate of men's self-reported perpetration. Some have suggested that disparities between women's victimization rates and men's perpetration rates are likely due to men's nondisclosure (Kolivas & Gross, 2007; Koss et al., 1987; Strang et al., 2013). For example, men may view some of their past experiences as consensual even if coerced (the SES asks specifically about sexual acts that occurred or were attempted without consent). This raises concerns about the focus on consent in sexual violence measurement and sexual violence prevention.

Sexual violence rates are difficult to compare across studies given measurement differences. Our victimization rate was very similar to that found in two recent studies that examined university women's sexual violence by a current partner; however, our perpetration rate was comparatively low (Brousseau et al., 2011; Rapoza & Drake, 2009). These differences could be due to measurement differences (e.g., both past studies examined sexual violence at any time throughout the relationship whereas we asked about the past year). Our perpetration rate was more similar to DeKeseredy and Kelly's (1993) Canadian nationally representative sample (11% of university men reported perpetrating against a female dating partner in the past year).

Table 5 Men's perceived effects of IPSV on their partners and relationships

Type of Effect	%[a] (*n*)	Illustrative quotes
No effects on relationship or partner	59.6 (34)	"It had no bearing on our relationship going forward" "No change in the relationship and how each other viewed the other. Full commitment remains" "This activity did not effect my relationship as we were both drinking"
Negative effects on relationship or partner (e.g., it led to an argument, negatively impacted commitment or his partner's feelings or trust toward him, or "hurt" the relationship, or, as a result, his partner felt upset, uncomfortable, insecure, or awkward)	15.8 (9)	"It changed how I felt about my relationship with her and my commitment to her in a negative way It almost certainly affected how she felt about me too" "After that incident, our sexual relationship had a break" "This experience had definitely affected how she saw me as a partner and where our relationship was heading. It also made me rethink how I saw her as a person. Our relationship, both sexually and romantically, started to die down after that point until she broke it off" "She became immediately upset as anyone would and proceeded to talk to me about how uncomfortable she was at that time" "It made her feel insecure as if I only wanted to be with her for her body, and also affected her trust in me"
Positive effects on relationship or partner (e.g., it led to a conversation or better/more sexual interactions, increased commitment, or, as a result, they "set the boundaries of consent" or learned how to treat one another or communicate)	14.0 (8)	"We just realized that we should not take advantage of one of another when we have had too many drinks" "The experience set the boundaries of consent for further down the road" "In my opinion, our commitment grew" "Our relationship was still just as strong as before, if not stronger due to experience and our improved ability to talk things through"
Effects on self (Positive, negative, neutral, or unclear direction; e.g., they felt bad, guilty, ashamed, upset with themselves, or regretful; they learned something; or they started drinking less around their partner)	15.8 (9)	"Never happened again. Learned to accept when the other doesn't want sex" "I still feel uncomfortable about it and I don't drink as much around her anymore" "I immediately felt ashamed and apologized" "The experience caused me to feel extremely upset and frustrated with myself for around 1–2 weeks. After talking it over and listening to her side of the story, I was extremely ashamed of myself for attempting to do something that in my mind I knew was wrong"
Unclear (e.g., ambiguous statements about moving on or no serious effects) or irrelevant (e.g., he was describing: the incident itself, his immediate reactions to or what he thought/felt about her refusals, the state of the relationship but not as a result of the incident, why he was sexually violent)	56.1 (32)	"It was not THAT big of a problem to me" "I didn't remember what I did, but when we woke up she told me I was very adamant about making her have oral sex with me. She kept telling me we were both too drunk (we were) and gave in after a little while of trying. It didn't last long and the morning after I apologized to her" "Our relationship gets better every day, we're moving on" "I got mad because she hadn't given me a blowjob in two months but she was stubborn and didn't agree to it anyways" "It was not serious. It was gentle urging. Not full physical force" "Due to the fact that my partner and I were very close, she knew that I was very intoxicated. In the morning, I did not remember the events but she told me and I apologized for the incident and we moved on. Neither of us really thought much of the situation and we continued to date" "Being honest with one another is not a crime. We didn't actually engage in any sexual behaviour following my criticism, nor would I have expected it, but I felt relieved disclosing"

[a] Out of the 57 perpetrators who responded to the question about the effects of the most memorable incident. Counts include those who reported at least one of each type of effect (e.g., some reported multiple negative effects but are only counted once in the negative effects row)

Our study is the first to provide a detailed breakdown of university women and men's IPSV across different tactics and sexual acts. Despite the disparity between the overall victimization and perpetration rates in our studies, the general patterns were very similar. Together, these studies paint a consistent and detailed image of what university students' IPSV looks like. Both women and men reported that verbal coercion was the most common tactic, followed by use of intoxication and threats of harm or physical force. Previous research that has not provided as detailed a breakdown across tactics and sexual acts still confirms this general pattern among victims and perpetrators in intimate relationships: women more commonly experience and men more commonly use verbal and psychological pressure compared to threats or physical force (Brousseau et al., 2011; DeKeseredy & Kelly, 1993; Salwen & O'Leary, 2013; Wegner et al., 2014). The breakdown of rates for each type of sexual act was also quite similar between women and men in our two studies, with nonpenetrative sexual contact, oral sex, and vaginal penetration relatively evenly distributed among victims and perpetrators, and anal penetration comparatively less common. Using the SES victim and perpetrator categories, the patterns were also the same: sexual contact was the most common, followed by attempted coercion, attempted rape, rape, and coercion.

Although men in more casual relationships also more commonly use verbal and psychological compared to physical forms of sexual violence, the pattern appears more pronounced in intimate relationships. Wegner et al. (2014) found that committed relationship perpetrators were more likely than casual relationship perpetrators to use verbal pressure. This may be because men can obtain sex from an unwilling partner without using more forceful tactics (Abbey et al., 2004) and because sex among intimate partners may create assumptions of future consent or of obligation to continue to engage in further sexual relations (Ewoldt et al., 2000; Shotland & Goodstein, 1992; Wegner et al., 2014). Some of the responses to our open-ended question about men's perceptions of the effects of IPSV supported these contentions, as did our follow-up interviews with women and men (see Jeffrey & Barata, 2017, 2019). For example, perpetrators sometimes discussed sex as an assumed or expected part of relationships that should occur regularly (e.g., Study 2 open-ended response: "I got mad because she hadn't given me a blowjob in 2 months"; see also Jeffrey & Barata, 2019). Our interview research with women further suggested that men may not need to escalate to physical force or violence in intimate relationships because women already often feel guilty, like a "bad girlfriend" or like they are not "sexually pleasing" their partner when they decline sex, especially over time (Jeffrey & Barata, 2017, p. 921).

Unlike the more commonly used original SES (Koss & Oros, 1982), the SES-SFV and SFP also allowed us to examine oral and anal penetration separately. This was important because oral sex was the most commonly reported sexual act in our sample of perpetrators and anal penetration—although the least commonly reported by victims and perpetrators alike—was not trivial (18.6% of perpetrators, 21.3% of victims). Ours are the first studies to our knowledge to report the rates of university women and men's IPSV for anal penetration in their current or recent relationship across different tactics. Although not directly comparable due to measurement differences, the rates of anal penetration by threat or force were considerably higher in our study compared to in Brousseau et al. (2011): 6.4% of victims vs. 1.5% and 7.1% of perpetrators vs. 1.7%. Anal sex is commonly portrayed in pornography and increasingly so since the late 1980s (Jensen & Dines, 1998; Sun et al., 2008). Moreover, pornography consumption has been linked with both men's sexual violence (Koss & Dinero, 1988; Simons et al., 2012; Vega & Malamuth, 2007) and young women and men's experiences of anal sex (Johansson & Hammarén, 2007; Rogala & Tydén, 2003). Qualitative researchers have also found that young women and men commonly reported experiences with anal sex—usually in dating relationships—because "men wanted to copy what they saw in pornography" and because men coerced and persuaded (Marston & Lewis, 2014, p. 3). The rates of IPSV for anal penetration in our study are especially concerning given the evidence that anal rape has negative consequences—such as anxiety, depressive symptoms, and negative effects on sex life—above and beyond those of vaginal rape (Pinsky et al., 2017). Neuwirth and Eher (2003) also found that anal rapists were more violent than vaginal rapists during their crime. Longitudinal research is needed to examine whether (intimate partner) sexual violence for anal penetration is on the rise.

It is not clear whether most oral sex IPSV experiences in our samples involved cunnilingus or fellatio because the SES combines the two. However, given current dominant male-centered versions of heterosexuality (Jeffrey & Barata, 2020), the latter is more likely. Though not separated by relationship type, cunnilingus was much less common than fellatio in young adults' recent sexual experiences, especially when not accompanied with fellatio or intercourse (Vannier & O'Sullivan, 2012). Moreover, men may assume women's responsibility for performing oral sex (e.g., Jozkowski & Peterson, 2013).

Past research among university women and men has found that sexual violence incidents often involve alcohol use by the perpetrator and/or the victim (Abbey et al., 1998, 2001; Krebs et al., 2007, 2016; Lyndon et al., 2007). However, most of this work has either focused on casual relationships or has not distinguished between relationship types. A study with community men found that, compared to perpetrators of committed relationship sexual violence, perpetrators of casual relationship sexual violence drank more alcohol during the incident and were with women who drank more alcohol (Wegner et al., 2014). This may be because perpetrators who do not know their victims well "encourage them to drink heavily because intoxicated victims are less likely to notice danger cues, are more likely to agree to be alone, and to engage in some consensual sexual activities" (Wegner et al., 2014, p. 1363). While most previous research analyzed alcohol use in men's most severe sexual violence incident, we opted for most memorable since we were also asking men to describe the effects of this particular incident in detail and wanted to increase their recall. Regardless, the rates of alcohol involvement in our sample may suggest that men use intoxication to coerce sexual acts that they already know their partner might not otherwise engage in. Unlike all other sexual acts in Study 2 (for which most men used verbal coercion), intoxication was most commonly used for anal penetration. Likewise, according to women's reports in Study 1, their partners most commonly used intoxication for both anal penetration and sexual contact. Past research has also noted the "excuse-giving properties" of alcohol, whereby men attribute responsibility for sexual violence to their own and the woman's alcohol consumption (Abbey et al., 2001; Wegner et al., 2015). Indeed, in our follow-up interviews with perpetrators, some men blamed alcohol and used it to position sexual violence as one-time, out of character events (Jeffrey & Barata, 2019).

Past research among university women and men—that has, again, not distinguished between relationship type—has found that sexual violence most commonly occurs in a home or dorm room, often of the victim or perpetrator (Abbey et al., 1998, 2001; Krebs et al., 2007). Krienert and Walsh (2018) found that 82% of reported IPSV incidents in the National Incident-Based Reporting System occurred in the victim's residence (many likely representing a residence shared with the perpetrator). Our study extends these findings to university men's IPSV. IPSV most commonly occurred in men's own home or dorm room. This may suggest that men feel an even greater sense of control or entitlement in their own spaces (or that more sexual encounters in general occur there).

Finally, ours is the first study to our knowledge to have examined men's self-reported effects of their own IPSV on their relationships or partners. Most men in our study made at least one statement suggesting that their most memorable IPSV event did not affect their relationship or partner. Moreover, many unclear or irrelevant responses worked to minimize and normalize IPSV, as did explicitly reporting no effects. Men's minimizing language here was very similar to that used by a subset of perpetrators in our follow-up interview study (Jeffrey & Barata, 2019). Although many women also minimize and justify their partners' sexual violence and report neutral effects, other women (or the same women concurrently) report negative effects on their relationships including: arguments; altered views of their partner (e.g., seeing him as immature, not caring about her feelings, or as enjoying being in control); diminished romantic feelings or commitment; and ending the relationship (Jeffrey & Barata, 2017; Livingston et al., 2004). Men's reported negative effects in the current study were similar (e.g., decreasing partner's trust in him, leading to an argument, hurting the relationship), but uncommon. Our findings are concerning in light of abundant evidence for the extensive health and social consequences of sexual violence (e.g., Collibee & Furman, 2014; Dworkin et al., 2017; Goodman et al., 1993; Orchowski et al., 2020). Our findings with men are also consistent with previous research with women showing that a small subset report future positive effects of sexual violence on their relationships, often because of a conversation that resolved the issue (Jeffrey & Barata, 2017; Livingston et al., 2004). Some university men in Abbey and McAuslan's (2004) study also similarly reported having learned from a past instance of perpetrating sexual violence.

Limitations and Future Research Directions

Our findings should be taken in light of several limitations. First, we used convenience samples of women and men who volunteered to participate. There is potential for selection bias in our samples given that those who participate in sexuality research tend to be more sexually experienced and have more positive sexual attitudes (though this does not appear to be the case for survey research; Dawson et al., 2019). However, there is no evidence to suggest that victims participate in sexual violence research at higher or lower rates than nonvictims when informed about the study topic (Rosenthal & Freyd, 2018). We also did not include comparison groups of women and men with sexual violence experiences in nonintimate relationships (e.g., strangers, friends, casual dates). Future research that uses large representative samples and that compares sexual violence in different relational contexts is needed. Research on men's victimization and women's perpetration is also needed (e.g., Krahé et al., 2003), especially in intimate relationships. Second, several participants in Study 2 clearly misunderstood the open-ended question about IPSV effects and did not appear to be answering about an incident of sexual violence. Although we did not include these in our counts of positive, negative, and no effects, it is possible that other responses that were included also did not pertain to incidents of sexual violence. Moreover, many provided answers that were unclear/irrelevant with respect to perceived effects. Nevertheless, our difficulty recruiting men for our follow-up interview study suggests that open-ended, anonymized survey questions might be one of the only ways to hear from many perpetrators. A series of direct open-ended questions, rather than one lengthy question with examples of considerations, might work better for future research. Future research should also examine both partners' speech and interpretations about the same incidents.

Our definition of an intimate relationship included those who had been in a relationship for a minimum of three months, which may not be considered by some to be very longstanding. However, the mean relationship length in both of our samples was over one year, which may be fairly high for this age group. Our particular relationship criteria also mean that some responding to the SES (i.e., those who had broken up with their partner within the past year and those who started dating their partner within the past year) would have been responding about less than a full past year. Because of this, it is possible that our findings underestimate past-year incidence rates. Relatedly, our eligibility criteria excluded students in nonexclusive or nonmonogamous relationships. While we recognize that these relationships can be equally intimate, committed, and longstanding, we used the terms "exclusive/monogamous" as a way to help potential participants understand that we were not looking for those in casual relationships. Our decisions here were also meant to provide a very clear operational definition of intimate relationship (especially given the general lack of specificity in the literature) and to facilitate future research comparisons (Logan et al., 2015).

Finally, we focused on the contextual features of men's most memorable sexual violence incident unlike past research that has focused on most severe (Abbey et al., 1998, 2001). This means that we are unable to make clear comparisons regarding alcohol use and location between IPSV incidents in our sample and sexual violence against any woman since age 14 in previous research (Abbey et al., 1998, 2001). It also means that we cannot identify which experiences on the SES participants were referring to when answering the follow-up questions. Nevertheless, we used this language to help increase recall since we were asking men to provide open-ended details about their perceptions of the effects of this incident. This language has been used in at least one past study asking men to describe an instance in which they had been tempted to use force in a sexual relationship (Schewe et al., 2009).

Implications for Practice

Our findings broken down across different tactics and sexual acts offer an in-depth understanding of the nature and scope of IPSV among university students. They have important implications for future education and prevention. We found high incidence rates of IPSV for anal penetration and involvement of alcohol and intoxication tactics. Education and prevention efforts should target these issues. For example, prevention and/or healthy sexuality education efforts might challenge men and boys to think critically about pornography and portrayals of anal sex. Campaigns, especially for first-year university students, might target the culture of heavy alcohol consumption on university campuses and link this with the issue of sexual violence. Given previous work suggesting that perpetrators often intentionally target intoxicated women (Graham et al., 2014), these campaigns must work to disrupt the "excuse-giving properties" of alcohol (Wegner et al., 2015, p. 1022). This would also be important specifically for IPSV involving alcohol, given our findings here suggesting that men may use alcohol to coerce sexual acts that they know their partner would not otherwise engage in, and our findings elsewhere that men sometimes use alcohol to excuse their behavior (Jeffrey & Barata, 2019). In other words, campaigns cannot send the simple message that alcohol causes sexual violence.

Given the occurrence rates in this research, interventions should incorporate education about sexual violence scenarios between intimate partners and consider how prevention strategies and help-seeking may look different. Our findings also have implications for campus prevention and safety resources, which often target outdoor, stranger rape scenarios (e.g., emergency call posts, night walking services; Jeffrey et al., 2020). Campuses must provide programs and resources that target acquaintance and intimate partner sexual violence (e.g., Senn et al., 2015) and sexual violence occurring in private spaces (Jeffrey et al., 2020). Our findings also demonstrate that IPSV among university students most commonly involves men's verbal and psychological tactics and that perpetrators often do not perceive their IPSV to be harmful and normalize their behavior. This too is an important site of intervention and suggests that we must encourage men to critically reflect on their own behavior and how even seemingly mild IPSV can harm women.

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Declarations

Conflicts of interest The authors declare that they have no conflict of interest.

Ethical approval The University of Guelph's Research Ethics Board reviewed and approved all procedures in accordance with the ethical guidelines of the Canadian Tri-Council Policy Statement.

Informed consent Informed consent was obtained from all individual participants included in the study.

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