

Tribulations of the New Normal: The Impact of the COVID-19 Pandemic on Intimate Partner Violence and Related Essential Services

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The Crime Reduction Research Program

This project was funded through the British Columbia Crime Reduction Research Program (CRRP).

The CRRP is a research grant program administered and funded by the Province of British Columbia in collaboration with the Royal Canadian Mounted Police (RCMP). The CRRP is focused on investing in independent research to inform priority policing operations, policies, and programs related to public safety in British Columbia. In doing so, the CRRP also aims to foster greater collaboration between government, law enforcement, and academic experts in the field of policing and public safety.

Eligible research topics are identified on an annual basis by the BC Ministry of Public Safety & Solicitor General and the RCMP based on current and emerging provincial priorities. All grants are awarded on a merit basis by the CRRP Working Group.

Disclaimer

The statements, findings, and recommendations contained in this report have been reached independently by the authors of this report and do not necessarily reflect the views of the Province of British Columbia.

Author Note

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this report.

We gratefully acknowledge the financial support of the Crime Reduction Research Program, administered in partnership between the Ministry of Public Safety and Solicitor General, the Combined Forces Special Enforcement Unit of British Columbia, and RCMP 'E' Division.

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Abstract

In the context of the Coronavirus Disease (COVID-19) pandemic, provincial restrictions in British Columbia (BC) were necessary to manage the health crisis. The aim of the current investigation was to examine the effects of COVID-19 public health measures (e.g., lockdowns, physical distancing) on intimate partner violence (IPV) exposure among women residing in Metro Vancouver, BC, Canada, using the exposure reduction theory framework. We examined the differences between women exposed to physical or psychological IPV and unexposed women with respect to (a) sociodemographic factors, (b) their ability to access essential services, (c) financial insecurities during the COVID-19 pandemic, and (d) mental health, COVID-19-related stressors, and perceived social support.

A total of 1,504 adult women (18 years and older) were recruited to participate in a 20-minute online survey. Results showed significantly more sexual and ethnic minorities among women exposed to physical assault and more sexual minorities among women exposed to psychological aggression versus unexposed women. Also, among women exposed to physical or psychological IPV during the pandemic, most commonly reported issues included accessing a family doctor, mental health or counselling services, and paying for food and housing needs compared to unexposed women. Higher levels of anxiety, depression, COVID-19-related distress, and lower levels of tangible and emotional-informational social support were found among exposed women (i.e., physical assault and psychological aggression) than unexposed women. Findings are discussed in relation to policy implications, particularly concerning government entities (e.g., the Ministry of Health) and key service providers such as organizations supporting IPV survivors, mental health services, and income assistance services.

Keywords: COVID-19 pandemic; intimate partner violence; mental health; financial strain; accessing essential services

Introduction

Gender-based violence (GBV) has been internationally recognized as the most prevalent human rights violation (United Nations Population Fund, 2021). The province of British Columbia (BC) defines gender-based violence (GBV) as “violence that is committed against someone based on their gender identity, gender expression, or perceived gender. It can be physical, emotional, psychological, or sexual in nature” (Government of British Columbia, n.d., para. 1). While GBV impacts all individuals, women, sexual and gender minorities (i.e., LGBTQI2S+), Indigenous women, girls, and LGBTQI2S+ people are disproportionately represented among those victimized (Government of Canada, n.d.-a). A prevalent type of GBV is intimate partner violence (IPV), sometimes referred to as domestic or spousal violence. Canadian statistics reveal a disproportionate number of women reported among IPV victims. IPV consists of a broad spectrum of behaviours that occur between romantic partners (including ex-partners, common-law partners, married partners, or dating relationships), including physical assault, psychological aggression, sexual assault, and financial abuse of varying severity (Peterman et al., 2020; Government of Canada, n.d.-b)¹.

In Canada, a recent study found that almost eight in 10 victims of IPV were women (Burczycka, 2018). In 2018, self-report data showed that 44% of women indicated experiencing physical, psychological, or sexual IPV in their lifetime (Cotter, 2021). Furthermore, women experience more severe types of IPV, such as being threatened with a weapon (Cotter, 2021). Homicide statistics from 2020 revealed that 73% of victims killed by a romantic partner were women (Armstrong & Jaffray, 2021). Given these statistics, the current investigation focuses on women as the target population. Women exposed to IPV have been shown to experience adverse psychological effects such as depression, post-traumatic stress and other anxiety disorders, sleep difficulties, eating disorders, and suicidal ideation (World Health Organization [WHO], 2021b).

Within the context of emergencies such as climate change, natural disasters, civil unrest, pandemics, epidemics, or economic insecurity, escalations of family violence, especially IPV, tend to occur (Peterman et al., 2020). For instance, according to a recent article by *Ending Violence Association of Canada* (EVAC; Trudell & Whitmore, 2020), advocates suggested that the conditions created by the pandemic and subsequent lockdown measures in Canada increased IPV. Indeed, results from a recent national survey from 376 service providers who work in sexual assault centres, shelters, and transition houses across Canada found that the circumstances created by the COVID-19 pandemic and lockdown have created an increase in IPV and restrictions or barriers in accessing IPV support services – advocates have termed this the “shadow pandemic” (Trudell & Whitmore, 2020). In order to adapt intervention or prevention strategies in response to IPV increases, we sought to understand the experiences of women residing in the Metro

¹ While IPV and domestic violence (DV) may be considered the same, DV refers to (a) violence that takes place within the household context and (b) acts of violence can take place between any two people (e.g., parent-child; between siblings) within the household (Moorer, 2021).

Vancouver Region of BC, Canada, during the COVID-19 pandemic. Precisely, to investigate risk, mental health, and social support factors associated with IPV for women during this public health emergency.

Literature Review

Intimate Partner Violence (IPV): “The Shadow Pandemic”

In BC, the BC Centre for Disease Control (BCCDC) confirmed a total of 346,196 cases of Coronavirus Disease (COVID-19) and 2,831 deaths as of February 23rd, 2022 (Provincial Health Services Authority, n.d.). As COVID-19 infections rapidly spread across the province, Dr. Bonnie Henry, Provincial Health Officer in BC, declared a public health emergency under the *Public Health Act* on March 17th, 2020 (Government of BC, 2020). Corresponding provincial guidelines and regulations included physical distancing, mandatory mask requirements, gathering restrictions, travel restrictions, work-from-home arrangements for non-essential workers, business closures, and quarantine measures (Government of BC, 2021). Although these provincial regulations were necessary to manage the COVID-19 outbreak in BC, unintended adverse health and social outcomes emerged, including increases in IPV, mental health-related issues, drug and alcohol addictions, drug overdoses, and unemployment (Center for Addiction and Mental Health, 2020). Various Canadian agencies working with women exposed to IPV reported a sharp increase in calls for services from women in their communities (e.g., Ryan, 2020; Trudell & Whitmore, 2020; Women and Gender Equality Canada, 2020a, 2020b). Statistics Canada (2020) reported that one in 10 women expressed extreme concerns about the possibility of domestic violence.

Further, 82% of service providers reported an increase in the prevalence and severity of IPV against women during the COVID-19 pandemic (e.g., see Trudell & Whitmore, 2020). Advocates have named this phenomenon a “shadow pandemic” as advocates, researchers, and service providers discovered increasing trends across numerous countries (e.g., Argentina, China, and France). The shadow pandemic is concerning amid the COVID-19 stay-at-home orders and business closures since women have fewer opportunities to access support services, and “perpetrators may take advantage of pandemic restrictions to further abuse, coerce, and control women” (Dale et al., 2021, p. 108). The necessary government guidelines and restrictions to mitigate the COVID-19 pandemic worsens the shadow pandemic, posing a major health crisis for women in the Metro Vancouver Region.

Risk Factors for IPV during Emergencies and Quarantine

Prior research has shown that violence against women increases during emergencies, including climate change, natural disasters, pandemics, and epidemics (Nagel, 2015; Parkinson, 2019; Terry, 2009; WHO, 2014; Zahran et al., 2009). Women bear the brunt of climate change-induced violence (Oberhaus, 2016), and an overwhelming number of women are victims compared to men (Rezwana, 2018). The link between extreme events

and IPV may be due to several intercorrelated factors. These factors include stress, trauma, suicidality, other mental health issues induced by physical isolation, instability, unemployment, economic hardship, scarcity of necessities, loss of possessions, and limited social support services all create tension within intimate relationships (Morrow & Peacock 1997; Ng et al., 2013; Peterman et al., 2020; Usher et al., 2020; vora et al., 2020).

The effects of extreme events, such as the recent COVID-19 pandemic, have shown similar adverse impacts on society (Campbell, 2020). Specifically, Campbell (2020) identifies several commonalities found from the COVID-19 pandemic and corresponding public health measures—such as social distancing, sheltering-in-place, restricted travel, and business closures—that are also used by governments following natural disasters (e.g., controlling behaviours/movement, unemployment, restricted access to support systems; Zahran, 2009). For instance, in the aftermath of the 2010 earthquake in Haiti, family functioning, household economy, and access to social networks were substantially disrupted (Weitzman & Behrman, 2016). This disruption, in turn, increased victim vulnerability while increasing the opportunity for perpetrators to inflict IPV (Weitzman & Behrman, 2016). Similarly, Serrata and Alvarado (2019) explored the negative familial consequences of Hurricane Harvey by conducting focus groups and interviews with survivors, organizational leaders and expert practitioners in the disaster zone. The study found that stress-related anger displacement, financial strain, and barriers to accessing services contributed to increasing rates and severity of IPV as this natural disaster unfolded (Serrata & Alverado, 2019). Past health crises, such as the severe acute respiratory syndrome (SARS) outbreak in 2003, demonstrated adverse mental health-related outcomes (Hawryluck et al., 2004). Among individuals who quarantined in Toronto, Canada ($n = 129$; median duration of quarantine = 10 days and interquartile range = 8–10 days), researchers found high rates of psychological distress. Approximately 30% of these individuals displayed symptoms of post-traumatic stress disorder (PTSD) and depression (Hawryluck et al., 2004), and the results were amplified as quarantine periods lengthened.

Parkinson (2019) interviewed 30 women to speak about their household experiences post-Australian fires, 17 of whom referred to their own experiences of IPV (Parkinson, 2019). Seventeen of them referred to the fires serving as catalysts for new or increasingly intense IPV. Additionally, according to Parkinson (2019), state and institutional capacity to counteract IPV violence were not sufficient in communities that lack the coordination and resources to address matters other than those directly related to crisis-response (Parkinson, 2019). Post-disaster experiences such as post-traumatic stress disorder and homelessness have also deprived individuals of the adequate capacity to rebuild their lives, placing them further at a disadvantage for IPV victimization (Fordham, 2008). Moreover, those subjected to the most direct impacts of natural disasters, such as displacement, housing or food shortages, and marital instability, were at a higher risk for IPV victimization (Schumacher et al., 2010).

The aforementioned post-disaster circumstances were accompanied by a marked increase in IPV rates following natural disasters, which is also apparent with the current rates of IPV amid COVID-19. Reports have shown a 25% increase in calls to the National Domestic

Abuse Helpline (Kelly & Morgan, 2020), and an increase in demand for IPV abuse services (Grierson, 2020; Women's Aid, 2020). While rates for property crimes and other forms of violence remained relatively stable, IPV reports have drastically increased following the impacts of natural disasters (Parkinson, 2019; Zahran et al., 2009). In the US and Canada, requests for domestic violence victim services increased for an entire year following natural disasters (Enarson, 1998). IPV rates increased fourfold after Hurricane Katrina (Anastario et al., 2009), and domestic violence reports increased by 600% only four months after the 1997 earthquake in Dale County, Alabama (Wilson et al., 1998). The surge of cases is apparent in contexts beyond North America as well. In one to two years following the 2010 earthquake in Haiti, there was a drastic increase in the probability for physical and sexual IPV to occur (Weitzman & Behrman, 2016). In New Zealand, police reported a 53% increase in the domestic violence incident reports after the Canterbury earthquake (Houghton et al., 2010). Increases in IPV during emergencies transcend socio-economic and ethnic boundaries, occurring in developing and developed countries (Parkinson, 2019).

COVID-19, IPV, Mental Health, & Social Support

Previous studies have investigated the psychological impact of quarantine during epidemics (e.g., SARS) and have shown that the experience of social isolation was associated with higher prevalence of adverse mental health outcomes, such as stress, anxiety, depression, and addictions (e.g., Reynolds et al., 2007). A recent meta-analysis found that COVID-19 restrictions, including quarantine measures and isolation had negative effects on mental health, particularly depression, anxiety, stress-related disorders, and anger (Henssler et al., 2020). Past pandemics have revealed that longer quarantine times were associated with poorer psychological outcomes (Brooks et al., 2020). In addition to the negative mental health outcomes that accompany emergencies, increases in IPV during the COVID-19 pandemic further exacerbated mental health-related issues (Allen-Ebrahimian, 2020; Campbell, 2020; Devries et al., 2013; Dutton et al., 2006; Godin, 2020; Golding, 1999; WHO, 2021a; Women's Aid UK, 2020). The combination of traumatic experiences created additional psychological and physical problems (Campbell et al., 2017; Catalá-Miñana et al., 2017). It has been well-established that psychological and physical IPV cause negative mental and physical health outcomes, including post-traumatic stress, depression, anxiety, self-harm, suicide attempts, eating disorders, physical injuries, substance abuse, and reproductive issues (Devries et al., 2013; Dutton et al., 2006; Ellsberg et al., 2008; Golding, 1999; Pallitto et al., 2013).

Social support has been found to be protective in mitigating or moderating mental health issues associated with IPV (Beeble et al., 2009; Guruge et al., 2012; Ogbe et al., 2020). Specifically, access to sufficient social support reduces the adverse impacts for women in violent relationships (Katerndahl et al., 2013). In general, the perception of a strong social support system, such as access to emotional, informational, or tangible supports has a protective health benefit (e.g., Reblin & Uchino, 2009). Among women exposed to IPV, longitudinal studies show a protective effect of social support on reducing abuse, post-

traumatic stress, depression, anxiety, and increasing well-being (see Bybee & Sullivan, 2002; Mertin & Mohr, 2001).

Economic Strain, Financial Insecurities, & Difficulty Accessing Essential Services

The COVID-19 pandemic and public health emergency measures significantly impacted the economic sector on a global scale. Unemployment rates worldwide rapidly increased, with millions depending on income assistance (Kennedy 2020). Unprecedented rates of unemployment due to the COVID-19 pandemic were creating high rates of poverty globally (Kawohl & Nordt, 2020). The relationships between IPV and financial strain has been well-established in the scholarly literature, with substance/alcohol abuse, physical isolation, and emasculation as aggravating factors (Lucero et al., 2016; Peralta et al., 2010; Richards, 2009; Schneider et al., 2017; Schwab-Reese et al., 2016). Indeed, recent survey results have also shown a relationship between pandemic financial strain and increasing rates of IPV among women and Indigenous women (Amnesty International, 2020). Elevated financial stress increases women's risk of economic abuse by a partner with greater control over the financial resources (WHO, 2021a). Previous studies on IPV post-natural disasters demonstrated that men have an increased incentive to claim grant monies (Enarson, 2012). As such, financial abuse represents a tactic used by IPV perpetrators to discourage victims from leaving (Ullestig & Eriksson, 2017). Additionally, individuals who lacked financial capacity were more prone to victimization, as they were reliant on partners for financial resources (Kalmuss & Straus, 1982).

The pandemic put a strain on healthcare systems limiting health supplies, equipment, and other requirements (e.g., personal protective equipment, ventilators, and medicine). Doctors, nurses, emergency personnel, and law enforcement are frequently IPV victims' initial point of contact. These professionals are vital in IPV identification and intervention (Cheng & Lo, 2019; Bradley et al., 2020). Given the reduced access to the healthcare system, physical distancing and lockdowns measures during the COVID-19 pandemic, identification and intervention for IPV may also be reduced (Lyons & Brewer, 2021).

For instance, during the Ebola outbreak in West Africa, reports of IPV were deprioritized, which led to many cases being unaddressed (Onyango et al., 2019). In Sierra Leone, IPV services in the public health system were severely disrupted as resources and personnel were redirected (International Rescue Committee, 2015). Also, in Liberia, police and justice systems were overwhelmed with managing the Ebola outbreak, with limited capacity to respond to IPV reports (UNICEF GBViE Helpdesk, 2018). Especially during times of uncertainty, public health sectors and justice personnel must be equipped with sufficient understanding to localize and effectively respond to the needs of IPV victims.

Overall, reports have suggested that COVID-19 restrictions such as "stay-at-home" orders introduced by the government as public health measures may force women into isolation with their abusers, consequently placing them at risk of experiencing violence more often and with escalating severity (House of Commons Canada, 2021). Being in isolation with

their abusers further impedes women's ability to access online or phone support services. Additionally, the dampening of the economy due to COVID-19 negatively affected social services organizations such as shelters, hotlines, crisis centers, legal aid, and protection services in terms of being stretched of its resources (WHO, 2021a), thus further impeding and limiting women's access to such services.

Theoretical Framework: Exposure Reduction Theory of IPV

The exposure reduction theory of IPV postulates that increases in face-to-face interactions with a perpetrator produce more opportunities for IPV to occur (Chin, 2012; Hsu & Henke, 2021). This theoretical framework hypothesizes that women who spend more time in a shared space with an abusive partner experience increased incidents of IPV (e.g., working from home). In the COVID-19 pandemic context, public health stay-at-home guidelines, and high layoffs within the hotel, retail, or food industries decreased the exposure reduction effect (i.e., increasing more time spent at home with an abusive partner; Chin, 2012; Hsu & Henke, 2021). Specifically, public health instructions to stay at home increased victims' time and proximity to abusive partners while lowering bystander intervention. Bystanders are less likely to observe and inquire about warning signs of abuse (Rensburg & Smith, 2021; Senn, 2015). Chances for bystander intervention diminishes due to community closures, especially during the COVID-19 pandemic. Women exposed to IPV have limited access to support services, including reduced public transportation, cutbacks to social service agency hours and funding, and hesitation accessing health care following IPV due to COVID-19 exposure concerns (Rensburg & Smith, 2021). Therefore, under the COVID-19 stay at home orders in BC, agencies anticipated that these measures would lead to an increase in IPV, especially among vulnerable populations of women, including but not limited to women with mental health-related issues, lower verbal IQ, and alcohol or substance abuse in the home environment (Center for Disease Control and Prevention, n.d.). Guided by the exposure reduction theory of IPV, we hypothesized that public health measures used during the COVID-19 pandemic would lead to increases in IPV exposure for women in BC. In addition, the COVID-19 pandemic amplified other well-known IPV risk factors such as financial strain, distress, reduced access to services (WHO, 2021a).

Current Study

BC is experiencing two simultaneous crises (i.e., the COVID-19 pandemic and the increase in IPV), in which women are most adversely affected (e.g., Allen-Ebrahimian, 2020; Campbell, 2020; Davies & Batha, 2020; Duncan, 2020; Kagi, 2020; Kelly & Morgan, 2020; Peterman et al., 2020; Poate, 2020; van Gelder et al., 2020; Wagers, 2020). The ongoing surge of IPV raises important questions as to how the growing uncertainties in the COVID-19 pandemic have created negative social realities among women who are at risk of IPV victimization. The current study was explorative in nature and aimed to gain a better understanding of women residing in the Metro Vancouver Region who were exposed to IPV during the COVID-19 pandemic. We sought to understand the impacts of public health emergency guidelines and regulations on women (e.g., stay-at-home orders,

business closures, work-from-home arrangements) such as difficulties accessing services and experiencing financial difficulties. The purpose of this project was to collect survey data from women living in the Metro Vancouver Region in BC, Canada, regarding their experiences during the COVID-19 pandemic. Another objective was to identify possible effects or issues such as experiences with IPV, adverse mental health outcomes, or a lack of social support that has not been addressed by current policies or support measures. We used the following research questions to guide our investigation:

1. Are there differences between women exposed to physical or psychological IPV and unexposed women with respect to (a) sociodemographic factors, (b) their ability to access essential services, and (c) financial insecurities during the COVID-19 pandemic?
2. Is there a difference between women exposed to physical or psychological IPV and unexposed women with respect to their mental health-related outcomes, COVID-19-related stressors, or perceived social support?
3. Are there relationships between COVID-19-related stressors, mental health related outcomes, and access to essential services among women exposed to physical or psychological IPV?

Lastly, one of our main research purposes is to focus on offering insights to key service providers (e.g., social services, mental health service providers) and policymakers regarding the social support needs of women survivors of IPV in BC.

Methodology

Participants & Procedure

This investigation uses a cross-sectional retrospective survey design to evaluate IPV victimizations among women residing in the BC, Metro Vancouver Region during the COVID-19 pandemic. Following ethics approval by Simon Fraser University's research ethics board (Study Number: 30000198), participants were gathered through [Qualtrics'](#) research participant pool to complete a 20-minute online survey. Qualtrics's [research participant pool](#) is a group of individuals who have already agreed to be contacted for participation in online surveys. We worked with Qualtrics's Research Services team to select a sample that represented our target population, i.e., women from Metro Vancouver. We used a non-probabilistic quota sampling procedure to select women to participate in our study that were proportionately representative of the population of women within each municipality (i.e., 21 municipality) in the Metro Vancouver Region on key sociodemographic characteristics (e.g., age, ethnicity). We asked women for the first three letters of their postal code to verify that we gathered a sample of women proportionately representative. Women were required to be at least 18 years of age to participate. Informed consent was authenticated using verification questions. Participants were required to correctly answer a series of questions to verify that they read the informed consent webpage; these questions included eligibility requirement questions (i.e., age and gender) and understanding the purpose of the study. The online survey

included questions regarding sociodemographic information, psychological health, perceived social support, COVID-19-related experiences, and experiences with IPV over the past year. Survey measures were counterbalanced in a randomized sequence to reduce order effects as participants may answer questions differently depending on the questionnaire order (see Shaughnessy et al., 2006).

Measures

Sociodemographic Information

A 5-item sociodemographic questionnaire was created to collect information regarding participants' age, ethnicity, sexual orientation, relationship status, and level of education.

Psychological Measures

The Four-Item Patient Health Questionnaire for Anxiety and Depression. The Four-Item Patient Health Questionnaire for Anxiety and Depression (PHQ-4; Kroenke et al., 2011) draws two items from the Generalized Anxiety Disorder-7 (GAD-7) and two items from the Patient Health Questionnaire-8 (PHQ-8). The PHQ-4 is a brief self-report screening tool to measure anxiety and depression. This four-item questionnaire divides into two, 2-item subscales, anxiety (PHQ-2) and depression (GAD-2). Each item is scored on a 4-point response scale ranging from 0 (*not at all*), 1 (*several days*), 2 (*more than half the days*), to 3 (*nearly every day*) on items such as "feeling nervous, anxious, or on edge" or "feeling down, depressed, or hopeless" during the last two weeks. Total PHQ-4 scores are summed and range from 0 to 12, and subscale scores for PHQ-2 and GAD-2 are summed and range from 0 to 6. Higher scores denote higher levels of depression and anxiety (see also, Ghaheri et al., 2020; Löwe et al., 2009). In the current investigation, Cronbach's alphas for the total scale, anxiety subscale, and depression subscale are 0.92, 0.90, and 0.88, respectively.

The Brief Social Support Scale. The Brief Social Support Scale (BS6; Beutel et al., 2017) assess participants' perception of social support on tangible (e.g., to help with daily chores if you were sick) and emotional-informational (e.g., give you good advice about a crisis) types of social support. The BS6 includes 6 items, split into 2 scales with 3 items each. Participants are asked to indicate that "if you needed it, how often is someone available "to take you to the doctor if you need it," "to prepare your meals if you are unable to do it yourself," "to help with daily chores if you were sick" (*tangible scale*), "to give you good advice about a crisis," "to confide in or talk to about yourself or your problems," "who understands your problems" (*emotional-informational scale*). Participants respond on a 4-point response scale from 1 (*never*), 2 (*occasionally*), 3 (*mostly*), to 4 (*always*). Total scores are summed and range from 6 to 24. Alternatively, two subscale scores are summed and range 3 to 12. Previous studies show that higher social support is a protective factor against depression, suicidality, anxiety disorders, depersonalization, sleep disorders, and behavioural risk factors such as smoking (Beutel et al., 2017, 2019). Cronbach's alphas in the current investigation for the total scale, tangible scale, and emotional-informational scale are 0.92, 0.89, and 0.92, respectively.

COVID-19-Related Measures

The Impact of Event Scale with Modifications for COVID-19. The Impact of Event Scale with Modifications for COVID-19 (IES-COVID-19) was adapted by Vanaken et al. (2020) to measure the degree of distress an individual feels as a result of the COVID-19 pandemic. The IES-COVID-19 is a 15-item self-report measure used to assess the frequency of intrusive or avoidant thoughts regarding the COVID-19 situation. The IES-COVID-19 was based off the Dutch Impact of Event Scale, which was originally designed to evaluate distress to traumatic experiences/events such as rape, combat, natural disasters, or violence (Brom & Kleber, 1985; see also van der Ploeg et al., 2004). Each of the 15 items are scored on a 4-point response scale spanning from 0 (*not at all*), 1 (*seldom*), 3 (*sometimes*), to 5 (*often*) on items such as “I thought about it when I didn’t mean to” or “I avoided letting myself get upset when I thought about it or was reminded of it” (see the IES-COVID-19 in Appendix 1).

Although we retained the exact wording of the 15-items from Vanaken et al.’s (2020), we modified the IES-COVID-19 instructions slightly to be more specific on what we meant by the “the situation related to the corona virus.” For instance, we instructed participants in the following way: “please find below a list of statements regarding the *COVID-19 pandemic and its related effects (e.g., shelter-in-place orders, specific restrictions on social engagement and nonessential activities, physical distancing, business closures, travel restrictions, etc.)* [versus Vanaken et al.’s (2020) wording “*the situation related to the corona virus (COVID-19)*”]. Read each statement carefully and indicate to what extent that it would have been applicable to you during the last 7 days.” Thus, we added specific examples and specified that distress could be a result of the pandemic itself or its associated impacts.

The IES-COVID-19 measure includes two subscales. First, *the intrusion subscale* which consists of 7 items that measure intrusive ideas, images, feelings, or nightmares (see questions 1, 4, 5, 6, 10, 11, and 14 on Appendix 1) on statement such as “every thought about it brought back feelings about it.” Responses to the intrusion items are summed and range from 0 to 35. Second, *the avoidance subscale* consists of 8 items that measure self-reported avoidance of ideas, feelings, or certain situations (see questions 2, 3, 7, 8, 9, 12, 13, and 15 on Appendix 1). Responses to the avoidance items are summed and range from 0 to 40. Higher subscale scores indicate a greater degree of psychological distress related to the COVID-19 pandemic and its related effects (Vanaken et al., 2020). Total scores are calculated by summing all 15 IES-COVID-19 items; total scores range from 0 to 75, with higher scores indicating a greater degree of distress. We computed Cronbach’s alphas to evaluate internal consistency for the total scale and two subscales. The Cronbach’s alpha for the total scale, $\alpha = .93$, intrusion subscale, $\alpha = .89$, and the avoidance subscale, $\alpha = .86$ showed adequate internal consistency, suggesting that the items within the scale and subscales measure the same concept or construct (see Tavakol & Dennick, 2011).

Intimate Partner Violence Measure

The Revised Conflict Tactics Scale Short Form. The Revised Conflict Tactics Scale Short Form (CTS2S; Straus & Douglas, 2004) is a 20-item IPV measure that was adapted from the original longer 39-item version of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). Each item on the CTS2S is scored on an 8-point response scale to assess the number of times a particular strategy has been used over the past year by a couple during conflicts (i.e., negotiation, psychological aggression, physical assault, injury, and sexual coercion; Straus & Douglas, 2004). The CTS2S contains five scales: *negotiation*, *psychological aggression*, *physical assault*, *injury*, and *sexual coercion*. The *psychological aggression* scale consists of items that measure the frequency of tactics, both verbal and non-verbal aggressive behaviours, that elicit psychological/emotional distress. The *physical assault* and *injury* scales include either physically aggressive tactics or physical injury as a result of a physical dispute, respectively. The *sexual coercion* scale measures forcible unwanted sexual activity (Chapman & Gillespie, 2019).

Each scale has four items, two items asking about the partner's actions and two items asking about the participant's actions. For example, the physical assault scale includes the following items: "I pushed, shoved, or slapped my partner," "my partner pushed, shoved, or slapped me," "I punched or kicked or beat-up my partner," and "my partner punched or kicked or beat-up me." Participants rate how frequently they have been the perpetrator or victim of a particular act over the past year. Therefore, the CTS2S can measure reciprocal violence (Feld & Straus, 1989). We calculated Cronbach's alphas to evaluate internal consistency for each scale: *negotiation*, $\alpha = .85$, *psychological aggression* scale, $\alpha = .74$, *physical assault*, $\alpha = .83$, *injury*, $\alpha = .77$, and *sexual coercion*, $\alpha = .81$, which showed adequate internal consistency (see Tavakol & Dennick, 2011). The 8-point response scale options include: 0 (*this has never happened*), 1 (*once in the past year*), 2 (*twice in the past year*), 3 (*3–5 times in the past year*), 4 (*6–10 times in the past year*), 5 (*11–20 times in the past year*), 6 (*more than 20 times in the past year*), 7 (*not in the past year*).

Responses are recoded into a mid-point score to reflect frequency: 0 (*this has never happened*), 1 (*once in the past year*), 2 (*twice in the past year*), 4 (*3–5 times in the past year*), 8 (*6–10 times in the past year*), 15 (*11–20 times in the past year*), 25 (*more than 20 times in the past year*), 0 (*not in the past year*) (Straus & Douglas, 2004). For the purposes of our investigation, we focused exclusively on *psychological aggression*, *physical assault*, and *injury* victimization items, excluding perpetration items that signify reciprocal IPV (i.e., acts of physical or psychological violence directed from women to partners). Responses on individual scale items are reported in Table 2. For further analyses (i.e., chi-square tests and independent-samples t-tests), we summed the scale items within physical assault and psychological aggression scales and then dichotomized the variable (i.e., 0 = not exposed to physical assault or psychological aggression over the past year; 1 = exposed to physical assault or psychological aggression over the past year). For example, we added participants' scores on the physical assault scale items, a score of "0" would remain a zero, and any score ranging from 1-50 was recoded into a "1." The same procedure was used for psychological aggression.

Financial Issues & Accessing Services During the COVID-19 Pandemic

We developed two measures to identify financial issues and difficulties accessing essential social services as a result of the COVID-19 pandemic. For financial issues, we instructed participants to indicate yes or no to all the types of living expenses they had trouble paying for due to the COVID-19 pandemic guidelines, and restrictions. Specifically, metrics pertaining to financial issues included the following list of 8 expenses: food, housing, heat and electricity, medical needs, transportation, childcare, or debts. Response items were dichotomized into 0 (*no*) and 1 (*yes*) for each of the expenses. Due to a low response rate on the “other expenses” category, we excluded this item from analysis. For difficulties accessing essential social services measure, participants were asked to indicate *yes* or *no* to all the types of services they had issues accessing during the COVID-19 pandemic out of the list of 13 services (family doctor/“GP”, accident or emergency services, mental health-related services, drugs or alcohol abuse services, sexual health clinics, counselling or therapy services, anger management courses, social services, police services, parenting classes/courses, legal services, housing services, or domestic violence services). Response items were dichotomized 0 (*no*) and 1 (*yes*) for each of the services.

Analytic Strategy

Descriptive statistics of women in the Metro Vancouver Region ($n = 1504$) were analyzed using IBM SPSS® software. To address the first research question, we conducted chi-square tests (with post-hoc tests) to explore the group differences between women exposed to IPV (including physical assaults and psychological aggression) and women unexposed to IPV with respect to sociodemographic information, access to services, and financial insecurity. To address the second research question, we conducted independent samples t-tests to understand the difference between women exposed to IPV (including physical assaults and psychological aggression) and women unexposed to IPV with respect to mental health outcomes and social support). Lastly, Pearson’s correlation analyses were conducted among women exposed to physical assault ($n = 135$) and women exposed to psychological aggression ($n = 739$) between mental health factors, COVID-19 related distress and social support. Across these bivariate tests, relevant assumptions (e.g., Levene’s equality of variance, normality) were checked and addressed accordingly.

Results

Participants

The sample is comprised of 1504 women. As shown in Table 1, women in our sample had an average age of 44.53 years ($SD = 14.65$; *range* = 18 to 91). Almost three-quarters (72.9%) of women in our sample were White. Most participants had completed an undergraduate college/university degree (42.2%) or had completed some undergraduate college/university coursework (19.3%). The vast majority (90.9%) of women identified as straight and were either married (62.3%) or in a committed relationship (20.7%). The

frequency of different types of IPV victimization exposure over the past year on six CTS2S items concerning physical assault, physical injury, and psychological aggression are reported in Table 2. The most common form of victimization exposure among women was verbal abuse by a partner (48.5%), followed by non-verbal psychological abuse (i.e., destroying property or threats of violence; 9.3%), physical alterations (i.e., being pushed, shoved, or slapped; 8.6%), and beatings (i.e., being punched, kicked, or beat-up; 6.1%). Physical injuries due to IPV such as physical pain, sprains, bruises, or small cuts occurred for 8.3% of women in our sample and 5.9% required medical attention.

Table 1. Total Sample Sociodemographic Information.

	Total Sample (N = 1504)
Age (years)	<i>M</i> = 44.53 (<i>SD</i> = 14.65)
	<i>n</i> (%)
Ethnicity	
Caucasian/White	1096 (72.9)
East Asian	113 (7.5)
South Asian	81 (5.4)
Southeast Asian	58 (3.9)
African/Black	52 (3.5)
Hispanic/Latin American	30 (2.0)
Middle Eastern/North African	27 (1.8)
Multiracial	26 (1.7)
Indigenous	11 (0.7)
Pacific Islander	4 (0.3)
Eurasian or Central Asian	4 (0.3)
Other*	2 (0.1)
Sexual Orientation	
Straight	1368 (90.9)
Bisexual	87 (5.8)
Lesbian	39 (2.6)
Pansexual or asexual	10 (0.7)
Relationship Status	
Married	937 (62.3)
Non-married committed	312 (20.7)
Single	146 (9.7)
Casually dating	45 (3.0)
Legally separated/divorced	39 (2.6)

	Total Sample (N = 1504)
Widowed	25 (1.7)
Education	
Completed undergraduate degree	635 (42.2)
Some college/university education	291 (19.3)
Completed high school diploma	259 (17.2)
Completed postgraduate studies (PhD, MD, MA etc.)	159 (10.6)
Completed vocational degree/certificate	122 (8.1)
Some high school education	38 (2.5)

* Two participants selected the "other, please specify" response option for ethnicity, but did not specify their ethnicity in the blank text box provided in our survey.

Table 2. Frequency of Physical Assault, Physical Injury, & Psychological Aggression Victimization Over the Past Year on CTS2S Scale Items.

	0	1	2	4	8	15	25
	<i>Never happened or not in the past year</i>	<i>once</i>	<i>twice</i>	<i>3–5 times</i>	<i>6–10 times</i>	<i>11–20 times</i>	<i>more than 20 times</i>
<i>n (%)</i>							
Physical Assault							
My partner pushed, shoved, or slapped me.	1375 (91.4)	32 (2.1)	31 (2.1)	35 (2.3)	19 (1.3)	6 (0.4)	6 (0.4)
My partner punched or kicked or beat-me-up.	1412 (93.9)	20 (1.3)	21 (1.4)	21 (1.4)	14 (1.0)	8 (0.5)	8 (0.5)
Injury							
I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with my partner.	1379 (91.7)	36 (2.4)	28 (1.9)	21 (1.4)	21 (1.4)	8 (0.5)	11 (0.7)
I went see a doctor or needed to see a doctor because of a fight with my partner.	1415 (94.1)	18 (1.2)	29 (1.9)	11 (0.7)	13 (0.9)	11 (0.7)	7 (0.5)
Psychological Aggression							
My partner insulted or swore or shouted or yelled at me.	774 (51.5)	187 (12.4)	134 (8.9)	153 (10.2)	95 (6.3)	60 (4.0)	101 (6.7)
My partner destroyed something belonging to me or threatened to hit me.	1364 (90.7)	36 (2.4)	34 (2.2)	25 (1.7)	22 (1.5)	14 (0.9)	9 (0.6)

Physical Assault & Psychological Aggression: Differences Between Women Exposed to IPV and Unexposed Women

We exported survey responses into IBM SPSS® software for statistical analyses. Sociodemographic comparisons were analyzed applying chi-square tests for categorical variables. In addition, chi-square tests were used to assess comparisons for all other categorical variables related to accessing services during the COVID-19 pandemic (with post hoc tests), IPV-related physical injury, and COVID-19-related financial insecurities among women exposed to IPV and unexposed women on two types of IPV—physical assault and psychological aggression (i.e., “IPV groups”). Independent-samples *t*-test were used for all continuous variables: age, anxiety, depression, COVID-19-related distress, and perceived tangible and emotional-informational social support.

Sociodemographic Information

Chi-square tests showed statistically significant associations for sexual orientation, ethnicity, relationship status, education, accessing social services during COVID-19 pandemic, COVID-19-related financial insecurities between the IPV groups on physical assault and psychological aggression (see Table 3.1 to Table 4.4). Specifically, there were significantly more sexual minorities (19.9% versus 7.9% straight individuals), single individuals (18.8% versus 7.0% not single), ethnic minorities (11.8% versus 7.9% White), and individuals with a high school education (12.5% versus 8.1% with a post-secondary education) who experienced physical assault. Furthermore, 80% of women exposed to physical assault experienced physical injuries such as sprains, bruises, small cuts, physical pain, or required a visit to a doctor due to IPV (see Table 3.1). A similar pattern emerged for psychological aggression, as significantly more sexual minorities (64.0% versus 47.7% straight individuals), single individuals (56.1% versus 47.7% not single), and individuals with a high school education (55.2% versus 47.6% with a post-secondary education) experienced psychological aggression over the past year. Although, for this type of IPV, more Whites (50.8%) compared to ethnic minorities (44.6%) reported experiences with psychological aggression (see Table 4.1). Independent-samples *t*-test revealed statistically significant differences in age with respect to IPV groups. Women exposed to both physical assault ($M_{age} = 35.95$) and psychological aggression ($M_{age} = 42.47$) were younger than unexposed women ($M_{age} = 45.37$ and $M_{age} = 46.51$, respectively), details are reported in Table 3.4 and Table 4.4.

Difficulties Accessing Essential Services & Financial Difficulties during the COVID-19 Pandemic

We found statistically significant difference between women exposed to physical assault and unexposed women on accessing services and experiencing financial insecurities during the COVID-19 pandemic (Table 3.2 and Table 3.3). For difficulties accessing services, a series of chi-square post hoc tests using adjusted standardized residuals with a Bonferroni correction were used on each of the essential services (see Beasley & Schumacker, 1995; García-Pérez & Núñez-Antón, 2003). The proportion of women exposed to physical assault who indicated having issues accessing each of the services was

significantly higher than unexposed women at the $p < .001$ level. Specifically, women exposed to physical assault reported experiencing more difficulties accessing a family doctor (48.9% versus 33.0%), accident or emergency services (17.8% versus 6.8%), mental health services (31.9% versus 16.2%), drug or alcohol abuse services (24.5% versus 3.1%), sexual health services (16.3% versus 2.5%), counselling services (37.8% versus 13.1%), anger management courses (11.8% versus 1.9%) social services (28.9% versus 7.5%), police services (15.6% versus 2.8%), parenting classes (19.3% versus 4.3%), legal services (23.0% versus 3.9%), housing services (26.7% versus 6.3%), and domestic violence services (15.6% versus 1.0%) than unexposed women (see Table 3.2). Furthermore, there were significantly higher proportions of financial insecurity among women exposed to physical assault than unexposed women on: food (49.6% versus 22.4%), housing (52.6% versus 18.5%), heat and electricity (38.5% versus 14.2%), medical needs (30.4% versus 10.5%), transportation (28.1% versus 12.6%), childcare (17.0% versus 4.2%), and debt repayment (38.5% versus 25.8%; see Table 3.3).

Relatively comparable results were found between women exposed to psychological aggression and unexposed women on accessing services and financial insecurities (Table 4.2 and Table 4.3). Again, for difficulties accessing services, a series of chi-square post hoc tests using adjusted standardized residuals with a Bonferroni correction were used on each of the essential services (see Beasley & Schumacker, 1995; García-Pérez & Núñez-Antón, 2003). The proportion of women exposed to psychological aggression who indicated having issues accessing a family doctor, mental health services, drugs/alcohol abuse services, sexual health services, counselling services, anger management course, social services, police services, legal services, housing services, or domestic violence services was statistically significantly higher than unexposed women at the $p < .001$ level. Women exposed to psychological aggression indicated more difficulties accessing a family doctor (41.3% versus 27.8%), mental health services (25.2% versus 10.3%), drugs/alcohol abuse services (7.3% versus 2.7%), sexual health services (6.0% versus 1.6%), counselling services (24.0% versus 7.1%), anger management courses (4.2% versus 1.4%), social services (13.5% versus 5.4%), police services (6.2% versus 1.8%), legal services (8.0% versus 3.3%), housing services (11.0% versus 5.4%), and domestic violence services (3.8% versus 0.9%) than unexposed women (see Table 4.2). No statistically significant differences were found between women exposed to psychological aggression and unexposed women on accessing accident or emergency service (9.6% versus 6.0%) or parenting classes (7.4% versus 3.9%). Higher rates of financial insecurities were found among women exposed to psychological aggression compared unexposed women on: food (34.1% versus 15.9%), housing (27.9% versus 15.4%), heat and electricity (21.7% versus 11.4%), medical needs (16.5% versus 8.2%), transportation (18.7% versus 9.5%), childcare (7.8% versus 3.0%), and debt repayment (34.5% versus 19.6%; see Table 4.3). Overall, women exposed to physical or psychological IPV during the pandemic most commonly reported issues accessing a family doctor, mental health or counselling services, and paying for food and housing needs.

Mental Health, Social Supports, & COVID-Related Distress

Independent-samples *t*-test revealed statistically significant differences in anxiety, depression, perceived social support, and COVID-19-related distress between women exposed versus unexposed to physical assault and psychological aggression. On average, women exposed to physical assault reported higher levels of anxiety ($M = 3.07$ versus $M = 2.08$), depression ($M = 3.14$ versus $M = 1.93$), COVID-19-related distress ($M = 33.02$ versus $M = 23.58$), and lower levels of tangible ($M = 7.19$ versus $M = 8.98$) and emotional-informational ($M = 7.27$ versus $M = 8.89$) social support than unexposed women (see Table 3.4). Similar findings were discovered for women exposed to psychological aggression. On average, women exposed to psychological aggression, scored significantly higher on anxiety ($M = 2.67$ versus $M = 1.68$), depression ($M = 2.54$ versus $M = 1.55$), COVID-19-related distress ($M = 28.04$ versus $M = 20.93$), and lower levels of tangible ($M = 8.47$ versus $M = 9.15$) and emotional-informational ($M = 8.24$ versus $M = 9.19$) social support compared to unexposed women (see Table 4.4).

Correlation Analyses: Between Mental Health Measures, COVID-19 Distress, and Social Support among Women

Two bivariate correlation matrices were calculated to assess the relationship between anxiety, depression, COVID-19-related distress, and social support among women exposed to physical assault and women exposed to psychological aggression (see Table 5.1 and Table 5.2). Among women exposed to physical assault over the past year, Pearson correlations revealed a significant positive relationship between anxiety, depression, and COVID-19-related distress, suggesting that physical forms of IPV negatively impact mental health and psychological adjustment to pandemic life (see Table 5.1). A significant positive relationship existed between COVID-19-related distress and perceived tangible social support ($r = 0.18$), indicating that women who were exposed to physical assault had higher COVID-19-related stress, but at the same time, received more tangible support.

Furthermore, among women exposed to psychological aggression over the past year, anxiety, depression, and COVID-19-related distress were all significantly positively correlated revealing adverse mental and health outcomes (see Table 5.2). In addition, both anxiety ($r = -0.23$) and depression ($r = -0.28$) were negatively associated with perceived tangible and emotional-informational social support. This relationship indicated that women exposed to psychological aggression with higher levels of anxiety and depression showed decreases in perceived social support.

Table 3.1. Differences between Women Exposed to Physical Assault and Unexposed Women on Sociodemographic Variables and Injury Outcomes.

Physical Assault				
	Exposed (N = 135)	Unexposed (N = 1369)		
	<i>n</i> (%)		χ^2 (<i>df</i> = 1)	Cramer's V
Sociodemographics				
Sexual Orientation	–	–	21.65***	.12
Straight	108 (7.9)	1260 (92.1)	–	–
Sexual minority	27 (19.9)	109 (80.1)	–	–
Relationship Status	–	–	36.45***	.16
Not single	87 (7.0%)	1162 (93.0)	–	–
Single	48 (18.8)	207 (81.2)	–	–
Ethnicity	–	–	5.32*	.06
Caucasian/White	87 (7.9)	1009 (92.1)	–	–
Ethnic minority	48 (11.8)	360 (88.2)	–	–
Education	–	–	5.50*	.06
Postsecondary	98 (8.1)	1109 (91.9)	–	–
High school	37 (12.5)	260 (87.5)	–	–
Abuse				
Injury	–	–	829.42***	.74
Yes	108 (80.0)	39 (2.8)	–	–
No	27 (20.0)	1330 (97.2)	–	–

Note. Our recoding procedures include the following: (1) Ethnicity: *Caucasian/White* and *ethnic minority* (inclusive of East Asian (e.g., Chinese, Japanese, Korean), South Asian (e.g., Indian, Pakistani, Sri Lankan), Southeast Asian (e.g., Vietnamese, Filipino, Indonesian, Thai), African/Black, Hispanic/Latin American, Eurasian and Central Asian (e.g., Armenian, Turkish) categories), Middle Eastern/North African (e.g., Iranian, Iraqi, Syrian, Moroccan), Indigenous (e.g., First Nations, Metis, Inuit, Native American), Pacific Islander, Multiracial, and Other); (2) Sexual Orientation: *straight* and *sexual minority* (inclusive of lesbian, bisexual, pansexual, and asexual categories); (3) Relationship Status: *not single* (inclusive of married, non-married committed) and *single* (inclusive of single, casually dating, and legally separated, divorced, or widowed); (4) Education: *postsecondary* (inclusive of completed undergraduate degree, some college/university education, completed postgraduate studies (PhD, MD, MA etc.), and completed vocational degree/certificate) and *high school* (inclusive of some high school education and completed high school diploma). * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.2. Differences between Women Exposed to Physical Assault and Unexposed Women on Difficulties Accessing Essential Services During the COVID-19 Pandemic.

Physical Assault				
	Exposed (N = 135)	Unexposed (N = 1369)		
	n (%)		χ^2 (df = 2)	Cramer's V
Services				
Family Doctor	–	–	14.27***	.10
Yes	66 (48.9)	452 (33.0)	–	–
No	52 (38.5)	730 (53.3)	–	–
Did not require	17 (12.6)	187 (13.7)	–	–
Accident or Emergency	–	–	49.08***	.18
Yes	24 (17.8)	93 (6.8)	–	–
No	64 (47.4)	401 (29.3)	–	–
Did not require	47 (34.8)	875 (63.9)	–	–
Mental Health Services	–	–	62.71***	.20
Yes	43 (31.9)	222 (16.2)	–	–
No	58 (43.0)	319 (23.3)	–	–
Did not require	34 (25.2)	828 (60.5)	–	–
Drugs/Alcohol Abuse	–	–	156.53***	.32
Yes	33 (24.5)	42 (3.1)	–	–
No	50 (37.0)	264 (19.3)	–	–
Did not require	52 (38.5)	1063 (77.6)	–	–
Sexual Health Clinic	–	–	133.32***	.30
Yes	22 (16.3)	34 (2.5)	–	–
No	57 (42.2)	221 (16.1)	–	–
Did not require	56 (41.5)	1114 (81.4)	–	–
Counselling	–	–	83.72***	.24
Yes	51 (37.8)	180 (13.1)	–	–
No	47 (34.8)	309 (22.6)	–	–
Did not require	37 (27.4)	880 (64.3)	–	–
Anger Management	–	–	123.70***	.29
Yes	16 (11.8)	26 (1.9)	–	–
No	58 (43.0)	200 (14.6)	–	–
Did not require	61 (45.2)	1143 (83.5)	–	–
Social Services	–	–	118.10***	.28
Yes	39 (28.9)	102 (7.5)	–	–

Physical Assault				
	Exposed (<i>N</i> = 135)	Unexposed (<i>N</i> = 1369)		
	<i>n</i> (%)		χ^2 (<i>df</i> = 2)	Cramer's V
Services				
No	52 (38.5)	243 (17.8)	–	–
Did not require	44 (32.6)	1024 (74.8)	–	–
Police Services	–	–	113.14***	.27
Yes	21 (15.6)	39 (2.8)	–	–
No	60 (44.4)	255 (18.6)	–	–
Did not require	54 (40.0)	1075 (78.5)	–	–
Parenting Classes	–	–	100.78***	.26
Yes	26 (19.3)	59 (4.3)	–	–
No	48 (35.6)	202 (14.8)	–	–
Did not require	61 (45.2)	1108 (80.9)	–	–
Legal Services	–	–	135.84***	.30
Yes	31 (23.0)	53 (3.9)	–	–
No	55 (40.7)	260 (19.0)	–	–
Did not require	49 (36.3)	1056 (77.1)	–	–
Housing Services	–	–	112.78***	.27
Yes	36 (26.7)	86 (6.3)	–	–
No	50 (37.0)	244 (17.8)	–	–
Did not require	49 (36.3)	1039 (75.9)	–	–
Domestic Violence Services	–	–	221.19***	.38
Yes	21 (13.0)	14 (1.0)	–	–
No	63 (23.1)	194 (14.2)	–	–
Did not require	51 (37.8)	1161 (84.8)	–	–

Note. *** $p < .001$.

Table 3.3. Differences between Women Exposed to Physical Assault and Unexposed Women on Financial Insecurities Due to the COVID-19 Pandemic.

Physical Assault				
	Exposed (N = 135)	Unexposed (N = 1369)		
	n (%)		χ^2 (df = 1)	Cramer's V
Financial Insecurity				
Food	–	–	48.68***	.18
Yes	67 (49.6)	307 (22.4)	–	–
No	68 (50.4)	1062 (77.6)	–	–
Housing	–	–	84.60***	.24
Yes	71 (52.6)	253 (18.5)	–	–
No	64 (47.4)	1116 (81.5)	–	–
Heat & Electricity	–	–	52.75***	.19
Yes	52 (38.5)	195 (14.2)	–	–
No	83 (61.5)	1174 (85.8)	–	–
Medical Needs	–	–	44.89***	.17
Yes	41 (30.4)	144 (10.5)	–	–
No	94 (69.6)	1225 (89.5)	–	–
Transportation	–	–	24.51***	.13
Yes	38 (28.1)	173 (12.6)	–	–
No	97 (71.9)	1196 (87.4)	–	–
Childcare	–	–	39.51***	.16
Yes	23 (17.0)	58 (4.2)	–	–
No	112 (83.0)	1311 (95.8)	–	–
Paying Debts	–	–	10.13***	.08
Yes	52 (38.5)	353 (25.8)	–	–
No	83 (61.5)	1016 (74.2)	–	–

Note. *** $p < .001$.

Table 3.4. Differences between Women Exposed to Physical Assault and Unexposed Women on Continuous Variables: Age, Mental Health, & Social Support.

Physical Assault				
	Exposed (N = 135)	Unexposed (N = 1369)		
	M(SD)		t(df)	d
Age	35.95 (10.87)	45.37 (14.71)	9.28 (186.18)***	.65
PHQ-Anxiety	3.07 (1.53)	2.08 (1.91)	-6.98 (178.03)***	-.53
PHQ-Depression	3.14 (1.63)	1.93 (1.88)	-7.23 (1502)***	-.65
IES-COVID-19 Total	33.02 (15.34)	23.58 (16.94)	-6.23 (1502)***	-.56
BS6-Tangible	7.19 (2.24)	8.98 (2.73)	8.68 (175.68)***	.67
BS6-Emotional	7.27 (2.36)	8.89 (2.70)	7.40 (170.41)***	.60

Note. *** $p < .001$. Levene's tests for the assumption of homogeneity of variances for age, PHQ-Anxiety, BS6-Tangible, and BS6-Emotional were violated ($p < .05$). As such, for these variables, Welch's t statistics were reported.

Table 4.1. Differences between Women Exposed to Psychological Aggression and Unexposed Women on Sociodemographic Variables.

Psychological Aggression				
	Exposed (N = 739)	Unexposed (N = 765)		
	n (%)		χ^2 (df = 1)	Cramer's V
Sociodemographics				
Sexual Orientation	–	–	13.17***	.09
Straight	652 (47.7)	716 (52.3)	–	–
Sexual minority	87 (64.0)	49 (36.0)	–	–
Relationship Status	–	–	5.92*	.06
Not single	596 (47.7)	653 (52.3)	–	–
Single	143 (56.1)	112 (43.9)	–	–
Ethnicity	–	–	4.60*	.06
Caucasian/White	557 (50.8)	539 (49.2)	–	–
Ethnic minority	182 (44.6)	226 (55.4)	–	–
Education	–	–	5.50*	.06
Postsecondary	575 (47.6)	632 (52.4)	–	–
High school	164 (55.2)	133 (44.8)	–	–

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. See Table 3.1 for recoding details.

Table 4.2. Differences between Women Exposed to Psychological Aggression and Unexposed Women on Difficulties Accessing Essential Services During the COVID-19 Pandemic.

Psychological Aggression				
	Exposed (N = 739)	Unexposed (N = 765)		
	n (%)		χ^2 (df = 2)	Cramer's V
Services				
Family doctor	–	–	30.04***	.14
Yes	305 (41.3)	213 (27.8)	–	–
No	345 (46.7)	437 (57.1)	–	–
Did not require	89 (12.0)	115 (15.0)	–	–
Accident or Emergency	–	–	19.25***	.11
Yes	71 (9.6)	46 (6.0)	–	–
No	255 (34.5)	210 (27.5)	–	–
Did not require	413 (55.9)	509 (66.5)	–	–
Mental Health Services	–	–	67.95***	.21
Yes	186 (25.2)	79 (10.3)	–	–
No	195 (26.4)	182 (23.8)	–	–
Did not require	358 (48.4)	504 (65.9)	–	–
Drugs/Alcohol Abuse	–	–	27.12***	.13
Yes	54 (7.3)	21 (2.7)	–	–
No	176 (23.8)	138 (18.0)	–	–
Did not require	509 (68.9)	606 (79.2)	–	–
Sexual Health Clinic	–	–	28.45***	.14
Yes	44 (6.0)	12 (1.6)	–	–
No	155 (21.0)	123 (16.1)	–	–
Did not require	540 (73.1)	630 (82.4)	–	–
Counselling	–	–	92.13***	.25
Yes	177 (24.0)	54 (7.1)	–	–
No	182 (24.6)	174 (22.7)	–	–
Did not require	380 (51.4)	537 (70.2)	–	–
Anger Management	–	–	21.43***	.12
Yes	31 (4.2)	11 (1.4)	–	–
No	149 (20.2)	109 (14.3)	–	–
Did not require	559 (75.6)	645 (84.3)	–	–
Social Services	–	–	40.98***	.17
Yes	100 (13.5)	41 (5.4)	–	–

Psychological Aggression				
	Exposed (N = 739)	Unexposed (N = 765)		
	n (%)		χ^2 (df = 2)	Cramer's V
Services				
No	164 (22.2)	131 (17.1)	–	–
Did not require	475 (64.3)	593 (77.5)	–	–
Police Services	–	–	28.97***	.14
Yes	46 (6.2)	14 (1.8)	–	–
No	176 (23.8)	139 (18.2)	–	–
Did not require	517 (70.0)	612 (80.0)	–	–
Parenting Classes	–	–	14.68***	.10
Yes	55 (7.4)	30 (3.9)	–	–
No	138 (18.7)	112 (14.6)	–	–
Did not require	546 (73.9)	623 (81.4)	–	–
Legal Services	–	–	27.89***	.14
Yes	59 (8.0)	25 (3.3)	–	–
No	178 (24.1)	137 (17.9)	–	–
Did not require	502 (67.9)	603 (78.8)	–	–
Housing Services	–	–	19.22***	.11
Yes	81 (11.0)	41 (5.4)	–	–
No	154 (20.8)	140 (18.3)	–	–
Did not require	504 (68.2)	584 (76.3)	–	–
Domestic Violence Services	–	–	28.05***	.14
Yes	28 (3.8)	7 (0.9)	–	–
No	152 (20.6)	105 (13.7)	–	–
Did not require	559 (75.6)	653 (85.4)	–	–

Note. *** $p < .001$

Table 4.3. Differences between Women Exposed to Psychological Aggression and Unexposed Women on Financial Insecurities Due to the COVID-19 Pandemic.

Psychological Aggression				
	Exposed (N = 739)	Unexposed (N = 765)		
	n (%)		χ^2 (df = 1)	Cramer's V
Financial Insecurity				
Food			66.29***	.21
Yes	252 (34.1)	122 (15.9)		
No	487 (65.9)	643 (84.1)	–	–
Housing	–	–	34.48***	.15
Yes	206 (27.9)	118 (15.4)	–	–
No	533 (72.1)	647 (84.6)	–	–
Heat & Electricity	–	–	28.93***	.14
Yes	160 (21.7)	87 (11.4)	–	–
No	579 (78.3)	678 (88.6)	–	–
Medical Needs	–	–	23.85***	.13
Yes	122 (16.5)	63 (8.2)	–	–
No	617 (83.5)	702 (91.8)	–	–
Transportation	–	–	25.99***	.13
Yes	138 (18.7)	73 (9.5)	–	–
No	601 (81.3)	692 (90.5)	–	–
Childcare	–	–	17.29***	.11
Yes	58 (7.8)	23 (3.0)	–	–
No	681 (92.2)	742 (97.0)	–	–
Paying Debts	–	–	42.40***	.17
Yes	255 (34.5)	150 (19.6)	–	–
No	484 (65.5)	615 (80.4)	–	–

Note. *** $p < .001$.

Table 4.4. Differences between Women Exposed to Psychological Aggression and Unexposed Women on Continuous Variables: Age, Mental health, & Social Support.

Psychological Aggression				
	Exposed (N = 739)	Unexposed (N = 765)		
	<i>M(SD)</i>		<i>t(df)</i>	<i>d</i>
Age	42.47 (13.65)	46.51 (15.30)	5.41 (1492.66)***	.28
PHQ-Anxiety	2.67 (1.87)	1.68 (1.79)	-10.48 (1492.79)***	-.54
PHQ-Depression	2.54 (1.88)	1.55 (1.78)	-10.49 (1489.60)***	-.54
IES-COVID-19 Total	28.04 (16.73)	20.93 (16.57)	-8.28 (1502)***	-.43
BS6-Tangible	8.47 (2.67)	9.15 (2.77)	4.86 (1502)***	.25
BS6-Emotional	8.24 (2.58)	9.19 (2.75)	6.88 (1502)***	.36

*** $p < .001$. Levene's tests for the assumption of homogeneity of variances for age, PHQ-Anxiety, and PHQ-Depression were violated ($p < .05$). As such, for these variables, Welch's t statistics were reported.

Table 5.1. Bivariate Correlations Among Women Exposed to Physical Assault on Mental Health Factors, Social Supports, & COVID-19-Related Distress (n = 135).

Measure	1	2	3	4	5
1. Anxiety	–	–	–	–	–
2. Depression	.68**	–	–	–	–
3. IES-COVID-19 Total	.42**	.52**	–	–	–
4. BS6-Tangible	-.01	.01	.18*	–	–
5. BS6-Emotional	-.04	-.06	.12	.56**	–

Table 5.2. Bivariate Correlations Among Women Exposed to Psychological Aggression on Mental Health Factors, Social Supports, & COVID-19-Related Distress (n = 739).

Measure	1	2	3	4	5
1. Anxiety	–	–	–	–	–
2. Depression	.78**	–	–	–	–
3. IES-COVID-19 Total	.48**	.46**	–	–	–
4. BS6-Tangible	-.17**	-.23**	-.03	–	–
5. BS6-Emotional	-.23**	-.28**	-.08	.66**	–

Discussion

The Shadow Pandemic

Our results showed that out of the 1504 women we sampled, 48.5% ($n = 730$) experienced verbal abuse by a partner, 9.3% ($n = 140$) experienced non-verbal psychological abuse, 8.6% ($n = 129$) experienced physical alteration(s), and 6.1% ($n = 92$) experienced beating(s) over the past year. Overall, 58.1% ($n = 874$) of women in our sample experienced physical and/or psychological IPV over the past year (overlapping with the COVID-19 pandemic). Nationwide self-reported statistics in Canada obtained through the 2018 Survey of Safety in Public and Private Spaces (SSPPS) showed that 12% of women experienced IPV over the past 12 months before the survey. More specifically, SSPPS data revealed that 2.4% of women experienced physical IPV and 11.9% experienced psychological IPV over the past year (Cotter, 2021). Although our data measures IPV for the Metro Vancouver Region in BC only, self-reported IPV rates among our regional sample showed exponentially higher rates than national pre-COVID-19 IPV percentages. Despite the different samples and methodologies between these studies, other sources suggest a similar trend (e.g., Trudell & Whitmore, 2020). IPV advocates and researchers expected an increase in incidents of IPV during the pandemic as stressors compounded; for example, financial insecurities, difficulties accessing services, high unemployment rates, COVID-19 related distress, stay-at-home guidelines, physical isolation, and mental health issues. The exposure reduction theory explained this effect as women spent more time in the household with their abusers (Chin, 2012; Hsu & Henke, 2021).

Physical Assault & Psychological Aggression IPV Victimization: Implications During the COVID-19 Pandemic

We found more sexual minority women, single women, younger women, and women with a high school level education among those exposed to physical assault and psychological aggression compared to unexposed women. Our results further revealed more ethnic minority women among those exposed to physical assault, whereas more White women were exposed to psychological aggression. National statistics show that IPV prevalence rates are higher among sexual and gender minority women, women with lower household incomes (related to education; see Statistics Canada, 2017), and younger women (see Cotter, 2021). Interestingly, we found a different pattern that emerged from psychological aggression as more White women were exposed to psychological types of IPV than ethnic minorities. This finding may implicate a potential difference between the relationship between ethnicity and different types of IPV (e.g., physical versus psychological). Future research should further examine and differentiate the underlying mechanisms between women's ethnicity and different types of IPV.

Women exposed to physical assault and psychological aggression IPV reported experiencing more difficulties accessing essential services during the COVID-19 pandemic. As the COVID-19 pandemic put a strain on healthcare systems (e.g., limiting health supplies, shifting to telehealth services) and the overall economy (e.g., lack of resources

for shelters, crisis centres, legal aids, hotlines), women exposed to IPV during the pandemic experienced even more challenges accessing essential services (Cheng & Lo, 2019; WHO, 2021a). We found that women exposed to physical or psychological IPV reported more difficulties accessing all types of services. However, the top three most common services that women had difficulties accessing were: a family doctor, mental health services, and counselling services. A Canadian study, called the Survey on Access to Health Care and Pharmaceuticals, conducted from March 2020 to May 2021 over the COVID-19 pandemic, found that 50% of Canadians reported experiencing some degrees of difficulty in accessing health care services (Statistics Canada, 2021). The survey report indicated that difficulties accessing health care services stemmed from “problems with scheduling appointments, long wait times, access issues related to quarantine rules or office closures, difficulty getting a referral, cost, services not available in the area, and transportation” (Statistics Canada, 2021, para. 2). Although issues accessing services were commonplace during the pandemic, our results suggest that women exposed to IPV experienced higher rates of these difficulties when compared to their unexposed counterparts.

Given that health care providers are typically one of women’s first points of contact for IPV screening, intervention, or prevention, many women during the pandemic may have missed out on essential services to exit violent relationships (Bradley et al., 2020; Cheng & Lo, 2019). Others have suggested that difficulties in accessing services may be due to heightened partner monitoring in abusive relationships that reduces a woman’s chance of seeking support services (see Malhotra & Mason, n.d.). Overall, reduced access to the healthcare system further impedes initial identification and early intervention for IPV since medical professionals such as doctors, nurses, emergency personnel, frontline expert practitioners are the first point of contact with IPV victims (Lyons & Brewer, 2021). COVID-19 regulations such as “stay-at-home” orders may force women to be isolated with their perpetrators in a shared environment, which may place them at risk for future violence and impede their ability or autonomy to safely seek out online/phone services, or support services without worrying about future victimization (Amnesty International, 2020; House of Commons Canada, 2021; WHO, 2021a). Such a sequence of events creates a cycle that makes it extremely difficult for women to escape the IPV environment, especially during the context of the COVID-19 public health crisis (see Figure 1).

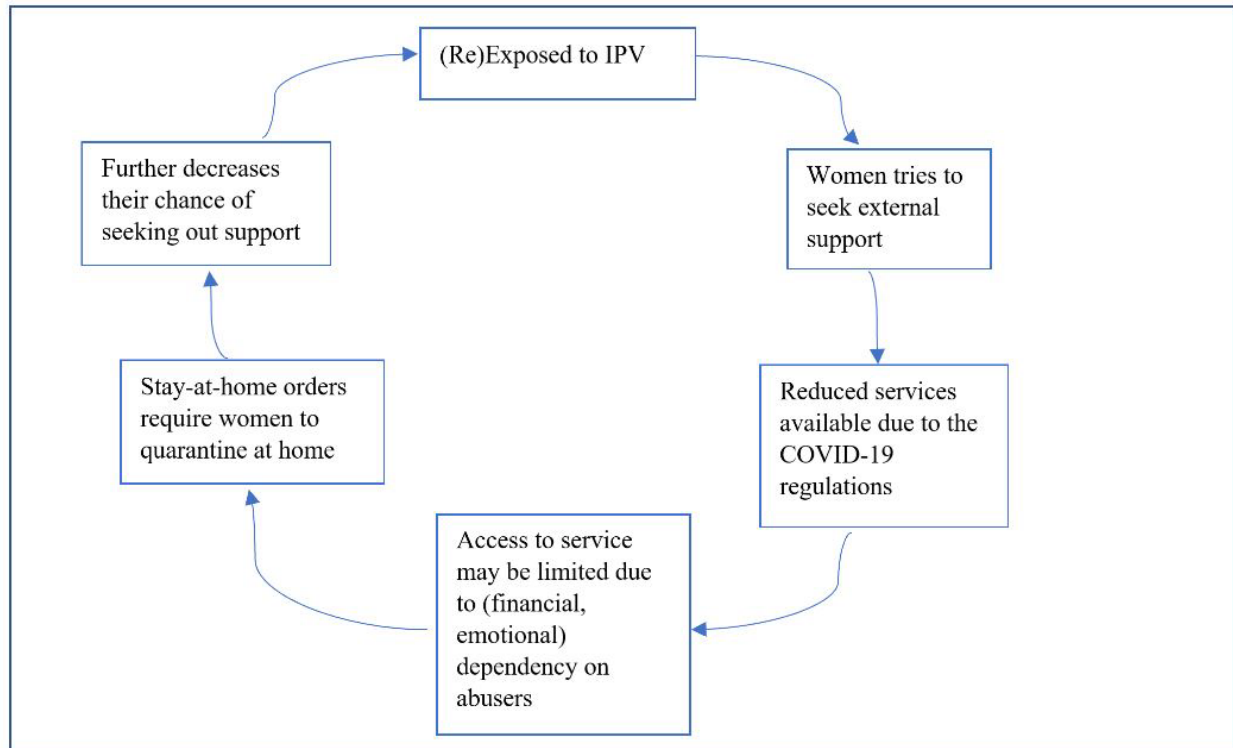


Figure 1. Cycle of IPV during the COVID-19 Pandemic.

Regarding financial strain, women exposed to physical assault and psychological aggression IPV had higher percentages of financial insecurity, such as problems paying for food, paying debts, and housing needs. Studies have shown that romantic partners under high financial strain were more likely to engage in IPV versus those under low financial strain (e.g., Benson & Fox, 2001). The number and type of financial stressors (e.g., food insecurity, housing nonpayment, utilities nonpayment, disconnected phone service) experienced by an individual have been shown to predict IPV perpetration (Schwab-Reese et al., 2016). Research conducted by McDougal et al. (2019) suggested that women's economic autonomy was generally associated with lower levels of recent IPV as increased financial inclusion can enable women to pursue exit options or support services; although, the researchers stated that this relationship was complex and dependent upon contextual factors. Furthermore, women exposed to physical assault or psychological aggression over the past year scored lower on perceived tangible and emotional-information social support and higher levels of anxiety, depression, and COVID-19 related distress compared to unexposed women. Within our subsamples of women exposed to physical assault or psychological aggression, a positive relationship was found between anxiety, depression, and COVID-19 related distress. These findings reflected previous research conclusions on extreme events and negative psychological impacts (Allen-Ebrahimian, 2020; Campbell, 2020; Devries et al., 2013; Dutton et al., 2006; Godin, 2020; Golding, 1999; WHO, 2021a; Women's Aid, 2020). Comparable to the previous SARS epidemics, social isolation stemming from quarantine was associated with adverse mental health outcomes including depression, anxiety, and addictions during the COVID-19

pandemic (Reynolds et al., 2007). Significant positive correlations between depression, anxiety and COVID-19-related distress indicated that the linkage between health crises and adverse mental health outcomes may be particularly evident within the IPV context (i.e., women exposed to physical assault IPV). Our findings further confirmed the previous literature that physical IPV is related to mental and physical health outcomes, including post-traumatic stress, depression, anxiety, self-harm, physical injuries and the more (Devries et al., 2013; Dutton et al., 2006; Ellsberg et al., 2008; Golding, 1999; Pallitto et al., 2013).

Among women exposed to psychological aggression, high anxiety and depression were negatively related to perceived social support, including tangible and emotional/informational support. Women exposed to psychological aggression with mental health-related issues may be hesitant to seek out external support as some may not classify their experience as violence. Whereas, among women exposed to physical assault high COVID-19-related distress was positively related to tangible support—suggesting that these women perceived that they were capable of receiving sufficient tangible support (e.g., making meals, doing chores). It could indicate that women who were exposed to physical assault may try to seek out tangible support to combat COVID-19-related stressors and in doing so, they may seek to avoid future victimization. Regardless of different IPV forms, the current COVID-19 context presented numerous interacting and interconnecting risk factors, which put women residing in the Metro Vancouver region of BC at an exponential risk for IPV. Given that IPV victimization is linked to adverse health outcomes (Breiding et al., 2008; Campbell, 2002; Coker et al., 2002; McCauley et al., 1995; Wuest et al., 2008; Yim & Kofman, 2019), we can extrapolate that ongoing health effects (e.g., psychological or physical) associated with IPV may compound with COVID-19-related stressors (Gresham et al., 2021). Although our study is cross-sectional and is unable to examine the prospective health outcome among women exposed to IPV, future research should explore the compounding effects of COVID-19 related stressors and ongoing health effects of IPV among IPV victims.

Policy & Practice Implications

In response to the shadow pandemic, various countries have implemented measures in an effort to strengthen IPV intervention while managing the impacts of COVID-19. Especially during the pandemic, it is critical to implement services that are (a) culturally and linguistically relevant and (b) financially accessible (Lipsky et al., 2006). As potential IPV victims are surrounded by additional stressors pertaining to COVID-19, Gresham et al. (2020) call for policies or programs that are aimed to (a) mitigate financial strain among victims (e.g., providing stipends), (b) provide virtual support programs that are sensitive to victims' surrounding circumstances and (c) address the stressful context pertaining to the current health crisis.

In France, warning systems were established at common community spaces, such as groceries and pharmacies, so that victims are better able to report to authorities without

alerting perpetrators. Authorities in Australia focused on civic empowerment, by providing specific guidance for family and friends regarding the support they can give when issues relating to IPV arise (for a review see Mittal & Singh, 2020). In the US, the National Domestic Violence Hotline has been implemented to boost online accessibility as online text chat services are becoming more commonplace. Court proceedings have also transferred to online platforms, with Beijing implementing cloud-based, online court hearings to deal with IPV cases during the COVID-19 pandemic (see Mittal & Singh, 2020). Mazza et al. (2020) emphasized the increased capacity to screen and assess the risks involved in IPV earlier on in the crisis. Such screening tools that are aimed to prevent acts of domestic violence should be based on empirical evidence surrounding multiple domains of abuse ranging from psychological, physical, and sexual forms of violence (Mazza et al., 2020). Effective interventions should be developed and implemented by multidisciplinary staff to address relevant aspects of support that are needed, including psychiatric, psychological, or socio-legal services (Mazza et al., 2020).

Other than a top-down approach, some scholars advocate for a bottom-up, community-based approach to account for informal means of social control. Increased cooperation between law enforcement, health and social services is needed to improve both surveillance and quality of care for IPV victims (Lundin et al., 2020). Campbell (2020) called for new and expanded community partnerships, such as between postal workers, garbage collectors, food delivery staff, home repair agents, to adopt informal sanctioning among community members. Since a majority of IPV cases tend to go undetected/unreported due to the subtle ways that victims can communicate their situation and request help, complexities surrounding the proper identification of IPV victimization should be addressed through increased public awareness (Bradbury-Jones & Ishaham, 2020). Sánchez et al. (2020) note the significance of public campaigns and leaflets or handouts that can help inform the public relating to its increasing rates, available services, and how to access them. For those who are unable to access virtual channels of support, the use of confidentiality codes in public spaces has also been implemented (Sánchez et al., 2020). By increasing public awareness, the strain on victims to overcome their victimization experiences can be alleviated to some extent, while ensuring that the public, as a society, is not placing the burden on victims.

Utilizing the Digital Age: Role of Media & Informed Public

Amid the emergence of the digital age, van Gelder et al. (2020) highlight the crucial role that the media plays in raising awareness about IPV and practices that can replace conventional in-person support during the COVID-19 pandemic. This can be done through periodic media reports and online schooling so that IPV victims and the public are aware of these challenges (van Gelder et al., 2020). Specifically, this may include bystander approaches, safety guidelines, informational content on service availability and available funding (van Gelder et al., 2020). With better public awareness, friends and relatives can be advised to stay in a close contact through phone calls or socially distanced meetings. With increased awareness, families and friends of victims will have a higher chance to be

able to raise suspicions especially when there is a loss of contact, which aligns with the idea of community members enforcing informal social control (e.g., Frye, 2007). Informal social control can act as both guardianship and victim empowerment as (a) perpetrators may become aware of the external oversight and (b) victims can be equipped with the hope and awareness that the harms can be alleviated during these times through proper social support.

Limitations and Future Research

There are several limitations worth noting. First, an online survey was used in this study; as such, findings were based off self-reported data which is susceptible to social desirability, a type of response bias. This bias may lead to an underestimation of IPV events. IPV is a sensitive topic; thus, participants may limit disclosure due to the fear for their safety (e.g., currently in a violent relationship). Nonetheless, self-reported data have been more accurate in estimating the prevalence of IPV than police-reported data (Brzozowski & Brazeau, 2008).

Second, we made efforts to recruit participants using a non-probabilistic quota sampling method to recruit women proportionally representative of the population in the Metro Vancouver Region. Although, an online survey may not reach potential participants who do not have access to a computer, Internet, or a smartphone. Consequently, certain members of the population may be under-represented (e.g., low socioeconomic women, women in shelters, and homeless women). Several suggestions for future researchers to consider include: 1) offering pen-and-paper surveys to target under-represented women, 2) setting up a local safe space with computers in communities for women to take the survey, and 3) contacting and establishing liaisons with local shelters and other service providers to reach hidden or vulnerable populations.

Third, the current study used a cross-sectional design reliant on retrospective self-reports of IPV. Therefore, we cannot infer causality from descriptive statistics or bivariate relationships. While we used considerable care in structuring our survey questions to direct participants to recall experiences since the COVID-19 pandemic began (i.e., 23 months prior), some participants may have already been experiencing financial strain, mental health-related issues, or issues accessing services prior to the pandemic restrictions. Relatedly, participants may also be subject to recall bias in self-report surveys where they believe that their IPV experience occurred closer in time (i.e., telescoping). This bias may affect the current study's 12-month IPV prevalence estimates. Potential avenues for future research include conducting multivariate analyses to examine the causal order between IPV and COVID-19 pandemic restrictions and to extend data collection on a longitudinal basis.

Fourth, this study did not use qualitative data (e.g., interviews). Qualitative data may provide in-depth details of IPV experienced by women, such as the intensity of the violence, specific circumstances leading up to the violence, and the degree to which women find it difficult to seek assistance. Nonetheless, results from this study have

revealed comprehensive incident estimates for IPV experienced by women in BC and can serve as a springboard for future research endeavours.

Despite these limitations, the current study constitutes the first large survey to date that examines IPV incidents and other variables associated with the COVID-19 pandemic among women residing in the Metro Vancouver Region of BC. The negative consequences of IPV compounded by the tribulations of the COVID-19 pandemic restrictions have created challenging conditions for women at the personal, economic, familial, and societal levels. Results from this study shed light on the complexity of IPV experienced by women in BC and can help inform efforts to expand and develop policies and programs to provide social, mental health, and economic support to this highly vulnerable population.

Conclusion

Ranging from verbal harassment to physical assaults, IPV demonstrates not only psychological, physical, and emotional harms, but also a harmful perpetuation of community dysfunction that allows for these behaviours to continue. The current study explored the complexity of IPV, particularly in the context of the COVID-19 pandemic.

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Appendix 1.

Please find below a list of statements regarding the COVID-19 pandemic and its related effects. Read each statement carefully and indicate to what extent that it would have been applicable to you during the last 7 days.

In the statements below, "it" refers to the COVID-19 pandemic and its related effects (e.g., shelter-in-place orders, specific restrictions on social engagement and nonessential activities, physical distancing, business closures, travel restrictions, etc.).

	Not at all	Seldom	Sometimes	Often
1. I thought about it when I didn't mean to.	0	1	2	5
2. I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	5
3. I tried to remove it from my thoughts.	0	1	2	5
4. I had trouble falling asleep or staying asleep because of pictures and thoughts about it that came into my mind.	0	1	2	5
5. I had waves of strong feelings about it.	0	1	2	5
6. I had dreams about it.	0	1	2	5
7. I stayed away from things that made me think about it.	0	1	2	5
8. I felt as if it hadn't happened or wasn't real.	0	1	2	5
9. I tried not to talk about it.	0	1	2	5
10. Pictures about it popped into my mind.	0	1	2	5
11. Other things kept making me think about it.	0	1	2	5
12. I was aware that I had a lot of feelings about it, but I didn't deal with them.	0	1	2	5
13. I tried not to think about it.	0	1	2	5
14. Every thought about it brought back the feelings about it.	0	1	2	5
15. My feelings about it were kind of numb.	0	1	2	5