# The Relationship between Minority Stress and Intimate Partner Violence in Women's LGBTQ+ Relationships: The Potential Mediating Role of Adult Attachment

by

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B.A. (Hons.), Queen's University, 2015

M.Sc., University of Victoria, 2017

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## Abstract

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Intimate partner violence (IPV) is a well-recognized public health issue with significant consequences for victims, families, communities, and society at large. Although IPV was once thought to be an almost exclusively male-to-female problem, in recent years it has become more widely understood that IPV also occurs in the context of women's LGBTQ+ relationships. LGBTQ+ individuals experience ongoing stress because they live in a heterosexist society, termed *minority stress,* which has been associated with many negative sequelae including attachment insecurity and IPV. Thus, it is pertinent to examine how one's context, specifically minority stress caused by oppression, may uniquely influence IPV in women LGBTQ+ couples. A sample of 64 LGBTQ+ identified women currently in same-gender relationships filled out self-report questionnaires on minority stress, attachment style, and IPV. Contrary to expectations, it was determined that two types of minority stress, internalized homophobia and experiences of discrimination and heterosexism, were *not* associated with physical or psychological IPV. However, internalized homophobia *was* significantly associated with attachment avoidance, but not attachment anxiety. Both attachment anxiety and avoidance were significantly associated with psychological, but not physical, IPV. Mediation analysis revealed an inconsistent significant mediation for the effect of internalized homophobia on psychological IPV; this occurs when the mediator acts as a suppressor variable or a variable that masks any

direct effect of the independent variable on the dependent variable. In the current study, the overall indirect effect of internalized homophobia on psychological IPV through attachment avoidance and anxiety was significant. The direct effect of internalized homophobia on psychological IPV was significant but the association was negative, such that once attachment (the suppressor variable) was included in the model, lower internalized homophobia was associated with greater psychological IPV. Overall, internalized homophobia uniquely contributed to attachment insecurity, particularly attachment avoidance, which is a significant risk factor for IPV in women's same-gender relationships

The global COVID-19 pandemic onset occurred before data collection commenced, thus questions were added to measure related changes in psychological symptoms, relationship stress, and IPV related to the pandemic. Psychological symptoms including sadness, loneliness, anxiety, and grief increased in the current sample since the pandemic onset. Similarly, self-reported relationship stress due to work, childcare, and health increased since pandemic onset. An increase in relationship stress was significantly positively correlated with an increase in psychological IPV since the pandemic onset. Thus, there was already an impact on participant's mental health and stress even within the first six months of the pandemic, although most participants did not report an increase in IPV at that time. Overall, the current study highlights the importance of attachment avoidance as a risk factor for IPV in women's same gender relationships. Additionally, the startlingly high prevalence rates of IPV and discrimination among LGBTQ+ women speaks to the urgent need to continue fighting against oppression and heterosexism to reduce minority stress and to develop IPV resources that better serve the LGBTQ+ population.

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## Introduction

Intimate partner violence is a significant public health concern, with IPV representing approximately one-third of all police-reported violent crimes in Canada (Statistics Canada, 2016). Approximately 4% of Canadians over age 15 reported experiencing physical or sexual violence in their spousal relationship and another 4% reported experiencing physical or sexual violence in their dating relationships within the past five years (Statistics Canada, 2016). In the United States, approximately 22% of women and 14% of men had experienced physical violence by an intimate partner in their lifetime (defined as being hit with something hard, being kicked or beaten, or being intentionally burned; Breiding et al., 2014). However, partner violence in lesbian, gay, bisexual, trans, queer and questioning, and other (LGBTQ+) relationships, and especially in women's same-gender relationships, has historically been a taboo, minimized, and misunderstood topic. The beginnings of the domestic violence movement in the 1970s emphasized male-to-female violence exclusively (Balsam, 2001). In 1983, violence in women's same-gender relationships first received attention in the public domain after the Lesbian Task Force of the National Coalition against Domestic Violence (Balsam, 2001) was formed in the United States. Following this, the first book on the topic was published by Hart in 1986, which not only gave lesbian survivors of IPV a voice but began to create awareness that IPV was occurring for women in same-gender couples both within the LGBTQ+ community as well as more broadly in the public domain (Balsam, 2001).

Since then, research has continued to examine violence in women's same-gender relationships and elucidate the similarities and differences to IPV in heterosexual couples. However, as Edwards, Sylaska, and Neal's (2015) review of the literature on IPV in LGBTQ+ relationships showed, although research on IPV has increased drastically in the past 15 years

(over 14,000 studies conducted since 1999), only 3% of those studies examined IPV specifically in LGBTQ+ relationships. Thus, more work is necessary to expand on research examining IPV in women's same-gender relationships. Further exploration of the unique risk factors for partner violence (including physical, psychological, and sexual violence) in same-gender male couples (and how they are similar or dissimilar from the risk factors for heterosexual and same-gender women couples) is certainly imperative. However, the current study focuses exclusively on women's same-gender relationships due to the distinct psychosocial influences impacting female same-gender couples (e.g., experiences of sexism, suppression of female sexuality, assumption that violence in intimate relationships is predominantly perpetrated by men and the subsequent impact of this on abuse disclosure for women in same-gender relationships). The current study uses the term 'women's same-gender relationships' to refer to an intimate relationship between women, including all of the diverse sexual orientations these women may identify as (e.g., including, but not limited to, lesbian, gay, bisexual, pansexual, asexual, queer, questioning, two-spirit, heterosexual, and those who prefer not to label their sexual orientation). Additionally, in the current study I focus on any person who currently identifies as a woman, irrespective of the gender they were assigned at birth.

**Prevalence of IPV in Women's Same-Gender Relationships**

Although progressively more research has focused on IPV in women's same-gender relationships, the prevalence rates in the research have been markedly disparate (ranging from 1% for sexual violence to 97% including lifetime perpetration of psychological, sexual, or physical violence; Edwards, Sylaska, & Neal, 2015). Lewis, Milletich, Kelley, and Woody (2012) discuss several possible explanations for the inconsistent prevalence rates, including: fear of the violent partners learning of the disclosure, fear of discrimination from police and services,

belief that services will not be helpful, one's own misunderstandings about what constitutes IPV due to gender socialization (e.g., belief that violence does not exist in women's same-gender relationships or cannot be perpetrated by women) and lastly, fearing that disclosing any negative information about their relationship will further stigmatize LGBTQ+ women and their intimate relationships.

Despite significant difficulty in determining consistent prevalence rates, several studies and meta-analyses have attempted to describe the frequency and severity of IPV in LGBTQ+ couples. Badenes-Ribera and colleagues (2015) conducted a systematic review of the prevalence and correlates of IPV in women's same-gender relationships. The researchers ultimately selected 14 research articles published between 1990 and 2013 which met their methodological and inclusion criteria and included some women identifying as LGBTQ+. The most commonly endorsed type of abuse was psychological/emotional/verbal abuse, however the prevalence rates ranged significantly between studies, with the least severe forms of psychological abuse having the highest prevalence rates (e.g., 71% for looking at one's partner with anger) and the most severe forms having the lowest prevalence rates (e.g., 16.3% for making threats). The prevalence of physical violence between women in same-gender couples also varied, with prevalence rates between 1% and 32.5% reported in studies (Badenes-Ribera, Frias- Nevarro, Bonilla-Campos, Pons-Salvador, & Monterde-i-Bort, 2015). Sexual violence perpetration ranged from 0.6% (when examining non-consensual sex and/or sexual torture occurring without other forms of abuse) to 1.4% (when sexual violence co-occurred with other forms of violence; Badenes-Ribera et al., 2015). In Edwards and colleagues (2015) review of 62 studies on IPV in sexual minorities, rates of IPV ranged from 1% (forced sexual perpetration behaviour) to 97% (psychological, physical, and sexual IPV lifetime perpetration for LGB people).

Rates of IPV in both Canada and the United States have been consistently higher and more severe for sexual minority women compared to heterosexual women (Jaffray, 2020; Statistics Canada, 2009; Statistics Canada, 2014; Turell, Brown & Herrmann, 2018). In Statistics Canada's 2014 General Social Survey (GSS), lesbian and bisexual women were more likely to report IPV victimization in the past five years (11% endorsed spousal violence) compared to heterosexual women (3% endorsed spousal violence), although the rates for lesbian and bisexual women may have included some IPV experienced in relationships with men. According to the GSS report from 2009, violence by an unmarried partner was five times higher for LGB couples in comparison to heterosexual couples (Statistics Canada, 2009). A recently released report on IPV in sexual minority women in Canada, which used Statistics Canada data from 2018, also found that LGBQ women were more likely to experience physical, sexual, psychological, and financial abuse than heterosexual women (Jaffray, 2020). Specifically, 67% of sexual minority women reported experiencing at least one type of IPV since age 15 compared to 44% of heterosexual women. Furthermore, 49% of LGBQ women reported a physical or sexual assault by a partner since age 15 compared to 25% of heterosexual women. Rates of sexual assault were comparable for lesbian women and heterosexual women (at 12% reporting sexual assault victimization; Jaffray, 2020). However, bisexual women were at a significantly higher risk for sexual assault by a partner than both lesbian and heterosexual women (34% reporting sexual assault victimization; Jaffray, 2020). Sexual minority women were more likely to report physical IPV (48% of bisexual women and 35% of lesbian women) compared to 23% of heterosexual women (Jaffray, 2020). Similarly, 67% of bisexual women and 59% of lesbian women reported psychological IPV compared to 42% of heterosexual women. Regarding IPV occurring only in the previous year, one in five LGBQ women (20%) reported some type of IPV compared to 12% of heterosexual

women (Jaffray, 2020). Not only do sexual minority women experience IPV at higher rates, but the violence also tends to be more severe for sexual minority women than heterosexual women (Jaffray, 2020). For example, in Jaffray's report using Statistics Canada data from 2018 revealed sexual minority women were seven times more likely than heterosexual women to report being forced to perform sex acts against their will and to report having been choked in the past year. Additionally, sexual minority women endorsed greater psychological consequences of IPV when compared to heterosexual women (Jaffray, 2020). Most LGBQ women (92%) reported at least one emotional symptom resulting from an IPV experience in the past year compared to 57% of heterosexual women. Rates of PTSD in sexual minority women who were victims of IPV in the past year were double that of heterosexual women (Jaffray, 2020). Thus, there is recent and strong evidence that physical, sexual, and psychological partner violence are occurring at much higher rates among sexual minority women compared to heterosexual women. Sexual minority women are experiencing more severe IPV and are more than twice as likely as heterosexual women to report negative psychological outcomes after IPV (Jaffray, 2020). Despite this, research on IPV and available community resources have still been vastly hetero-centric and have centred the experiences of heterosexual women.

Consistent with findings in Canada, in the United States National Intimate Partner Violence and Sexual Violence Survey, individuals who identify as bisexual were found to be more at risk for partner violence than any other sexual orientation (Black et al, 2011). Turell, Brown, and Herrmann (2018) examined potential explanations for this increased risk, including negative stereotypes surrounding bisexuality, whether relationships were monogamous or polyamorous, perceived infidelity, stereotypes of promiscuity, and the complex interaction between such stereotypes and the higher rates of open relationships for bisexual people.

Negative attitudes about bisexuality (i.e, bi-negativity) held by the perpetrator, along with real and suspected infidelity were risk factors for IPV, especially when the perpetrator was male and both partners identified as bisexual (Turell et al., 2018). The United States National Violence Against Women (NVAW) survey also found that transgender individuals reported significantly higher rates of physical IPV than lesbian individuals (34.6% vs. 14.0%; Tjaden & Thoennes, 2000). Thus, transgender women in same-gender relationships are likely at an even greater risk of IPV (Ard & Makadon, 2011).

Although there may be differences in the prevalence of IPV for lesbian, bisexual, and trans women (among other identities), LBT women do report similar concerns regarding IPV within the LGBTQ+ community. For example, a qualitative study which sought the lesbian, bisexual, and transgender community's perspective on IPV found that generally, survivors reported that: awareness about IPV within their community was low, they felt isolated within the abusive relationship itself and they avoided accessing formal services due to concerns about prejudice (Bornstein, Fawcett, Sullivan, Senturia, & Shiu-Thronton, 2006). Thus, conducting inclusive research which examines IPV in same-gender relationships for all individuals who identify as women is essential.

**COVID-19 and IPV.** Several studies have found the COVID-19 pandemic has exacerbated the frequency and severity of IPV (Gosangi et al., 2021; Moreira & Pinto da Costa, 2020; Sediri et al., 2020). For example, Gosangi and colleagues compared data from 25 women collected from March 11th to May 3rd 2020 to data from 42 women collected prior to the pandemic and found a greater frequency and severity of physical IPV occurring during the pandemic. Specifically, more severe physical injuries were reported during the pandemic (28 injuries reported in 2020 compared to 16 in the previous three years) and a greater number of

injuries were reported per IPV victim (1.1 during the pandemic compared to 0.4 from 2017 to 2019). Similarly, Sediri and colleagues (2020) found that among 751 women who reported on their mental health and experiences of violence, IPV increased from a prevalence rate of 4.4% prior to the COVID-19 lockdown to 14.8% during the lockdown, with psychological IPV as the type of violence most often occurring. Participants who experienced violence before the pandemic were most at risk for violence during lockdown (Sediri et al., 2020). The increase in frequency and severity of IPV is likely related to pandemic related restrictions such as forced cohabitation within an abusive relationship, exacerbation of pre-existing mental health difficulties such as substance use, as well as feelings of agitation related to an inability to engage in previously enjoyed activities (Barbara et al., 2020; Mazza, Marano, Lai, Janiri, & Sani, 2020).

Despite the increased rates and severity of IPV since pandemic onset, there is evidence there has also been an overall decrease or delay in reporting IPV and in the utilization of available community resources and services (Barbara et al., 2020; Gosangi et al., 2021). Women who have experienced IPV appear to be waiting longer to report the violence and seek community resources and supports which may be due to pandemic-related restrictions such as reduced social supports outside of the household and fears of catching the virus in community housing or while seeking support (Barbara et al., 2020; Gosangi et al., 2021.) Similarly, an article in the American Psychological Association published early on in the pandemic (April, 2020), reported that although the stay-at-home and physical distancing orders were expected to increase IPV, calls reporting IPV to law-enforcement actually decreased given the lack of options for individual's trying to leave the violence. Abramson (2020) found reports of IPV reports to law enforcement decreased by 23% within the first month of pandemic related restrictions (March to April 2020) but the reports that were made were more violent during this

period. Similarly, Wood and colleagues (2021) found safety concerns related to IPV had increased due to the impacts of the COVID-19 pandemic in heterosexual women. More than 40% of the participants indicated they were experiencing increased challenges related to health at work, stress due to financial difficulties, and difficulty staying safe and accessing resources and support (Wood et al., 2021). Wood et al. also found participants had mixed experiences with online services. Some participants reported appreciating not commuting and finding virtual services supportive and helpful. However, other participants reportedly did not find telehealth services helpful citing concerns such as confidentiality, technology safety (e.g., “zoom bombing”), lags on videocalls, and generally preferring to be face-to-face with care providers (Wood et al., 2021).

One study also found an increase in new or more severe violence for LGBTQ+ men; IPV perpetration prevalence was 15.17%, 34.44% of which was new or occurred more often than before COVID-19. Similarly, 46.88% of IPV victimization (prevalence of 14.95%) was new or happening more often than before COVID-19 (Walsh, Sullivan, Stephenson, 2020). Although I am not aware of any studies looking at the impact of COVID-19 on IPV in LGBTQ+ women, it is possible that IPV has increased in frequency and/or severity for LGBTQ+ women given the greater distribution of burden often found in marginalized communities, such as the LGBTQ+ community, BIPOC individuals, and people with (dis)abilities, who experience greater discrimination and less privilege and power within society.

**Types of IPV.** Although prevalence rates in the literature vary, the rates of IPV for lesbian, bisexual, and trans women are higher in comparison to heterosexual cisgender women (Decker, Littleton, & Edwards, 2018; Smith et al., 2017). Thus, it is clear IPV in women’s same-gender relationships is a significant problem that merits further research and investigation. The

types of IPV (e.g., physical, sexual, and psychological violence) that occur in women's same-gender relationships are similar to those in heterosexual relationships. Furthermore, like in heterosexual relationships, psychological violence occurs with the highest frequency and psychological aggression typically co-occurs with other types of abuse such as physical and sexual aggression (Lewis et al., 2012). Although the forms of IPV occurring in heterosexual relationships have also been shown to occur in same-gender relationships, Balsam and Szymanski (2005) suggested there are also some types of psychological aggression that are unique to LGBTQ+ individuals (e.g., threatening to disclose one's LGB identity to friends, family, and/or employers).

Coercive control is form of IPV intended to exert control over one's partner. Although it hasn't always been included within research and theories on IPV, research support that coercive control is an integral aspect of IPV is growing (Frankland & Brown, 2014). Coercive control can include many different tactics including monitoring a partner's activities and location, restricting a partner's access to family resources (e.g., finances, transportation, etc.) and/or means of communication (e.g., phone, internet, computer, etc.), and isolating a partner from their family and friends. Frankland and Brown (2014) found that coercive control does occur within same-sex relationships. Specifically, in a sample of 184 gay men and lesbians, 4.4% of participants endorsed engaging in coercive controlling violence and 6.5% of participants endorsed being a victim of coercive controlling violence (Frankland & Brown, 2014). This is comparable to prevalence rates found in heterosexual women with 4.1% to 8% reporting having experienced controlling, stalking and obsessive behaviours but much higher when compared to heterosexual men with only 0.5% - 2% reporting controlling, stalking, and obsessive behaviour victimization (Carney & Barner, 2012).

Although there are many similarities between same-gender and heterosexual couples with regard to risk factors (e.g., substance use, insecure attachment, history of child abuse, relationship dissatisfaction; Lewis, Mason, Winstead, & Kelley, 2017; McKenry, Serovich, Mason, & Mosack, 2006) and outcomes associated with IPV (e.g., substance use, developing chronic physical and mental health illnesses, depressive symptoms, missing work or school; Coker et al., 2002; Smith et al., 2017), it is critical to consider how contextual factors may impact IPV in same-gender couples differentially. Theories of risk and protective factors for IPV highlight the necessity of examining the overarching social context as a risk factor for violence. For example, in one systematic review of risk factors for IPV, the authors divide the relevant risk factors into levels based on a dynamic developmental systems perspective, which includes contextual characteristics such one's neighbourhood and community (Capaldi, Knoble, Shortt, & Kim, 2012). Although the systematic review did not include any studies with same-gender couples (as they reportedly did not meet inclusion criteria), the significant discrimination and prejudice individuals in same gender relationships endure as well as the overall cultural climate for LGBTQ+ people is likely a critical contextual factor to consider when examining all types of IPV in women's same-gender relationships.

**LGBTQ+ Based Discrimination**

Over the past several decades, the LGBTQ+ communities in Canada have progressively gained rights and visibility. This steady march toward equality has certainly been tumultuous and fraught with commingled triumphs and tribulations. In 1963, the Royal Canadian Mounted Police's Directorate of Security and Intelligence's A-3 Unit began mapping the alleged residences and highly frequented places of homosexuals with the intent to find and remove them from government and law enforcement positions (Kinsman & Gentile, 2010). In 1965, the last

person in Canada was imprisoned for homosexuality before it became decriminalized and given Royal Assent in 1969 (Warner, 2002). In 1973, the American Psychiatric Association removed the diagnosis of “homosexuality” from the second edition of the Diagnostic and Statistical Manual (DSM), representing the controversial shift from pathologizing homosexuality as a deviant defect to viewing it as a natural human variant (Dreschler, 2015). Still, 1981 was the year of the infamous Operation Soap (widely considered the Canadian version of the 1969 Stonewall riots in New York City), where Toronto police raided four bathhouses and arrested more than 300 men (Warner, 2002). The mass protests and events that ensued are considered a turning point in Canadian LGBTQ+ history. More recently, in July of 2005, Canada became the fourth country in the world, and the first country outside of Europe, to legalize same-gender marriage. In 2016, for the first time in Canadian history, a pride flag was raised on Parliament Hill and Justin Trudeau became the first Prime Minister to ever attend a Pride celebration.

These strides toward equality have tremendously improved the quality of life of LGBTQ+ people in Canada. However, LGBTQ+ people continue to face significant discrimination and victimization. In fact, a recent meta-analysis examining 102 peer-reviewed articles published over the past 20 years indicates the high rate of LGBTQ+ victimization is stable or increasing since the 1990s (McKay, Lindquist, & Misra, 2017). LGBTQ+ individuals report greater suicidality, poorer mental health, substance use challenges, and a myriad of physical health challenges (e.g., higher rates of disability, gastro-intestinal problems, and chronic illness) in comparison to their heterosexual counterparts (Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013; Lehavot & Simoni, 2011; Meyer & Northridge, 2007; Sandfort, Bakker, Schellevis, & Vanwesenbeeck, 2006). These adverse correlates of living in a heterosexist environment with a LGBTQ+ identity are regarded as a consequence of *minority*

*stress,* a term for the intense and chronic stress individuals with minority identities experience (Lick, Durso, & Johnson, 2013; Meyer, 2003). Minority stress in LGBTQ+ individuals began to emerge as a theory with the publication of *Minority Stress and Lesbian Women,* a book written by Virginia Brooks and published in 1981 (Rich, Salway, Scheim, & Poteat, 2020). Since then, Meyer has continued to advance work in the area of minority stress in sexual minority individuals by highlighting the inimitable stress associated with stigmatized identities and the subsequent privilege and/or disadvantage of that stigmatized social position (Balsam, Beadnell, & Molina, 2013; Meyer 1995, 2003). As we shift the lens to consider how contextual factors impact IPV in women's same-gender relationships, it is clear minority stress may also impact the rates and severity of IPV through its effect on established risk factors for IPV.

**Minority Stress**

As conceptualized by Meyer (1995), many different factors play a role in generating minority stress, such as *overt discrimination and victimization* (e.g., being denied employment or being assaulted), *expectations of rejecti*on (e.g., ongoing stress due to feared potential experiences of discrimination), *vicarious trauma* (e.g., hearing about other's negative experiences of discrimination and victimization), *internalized homophobia* (e.g., personally believing society's negative view of LGBTQ+ people), and stress associated with one's degree of '*outness*' (e.g. in the context of recurrent societal discrimination, LGBTQ+ people must decide the extent to which their sexual orientation and/or status as trans person is known to others and must subsequently incur the stress of concealment or fear of being 'outed').

Experiences of *overt discrimination/harassment and victimization* are significantly associated with increased levels of depression, anxiety, post-traumatic stress disorder (PTSD), and perceived life stress (Balsam, Beadnell, & Molina, 2013). According to a meta-analysis

examining experiences of victimization for LGBTQ+ students, the sexual minority youths were 1.7 times more likely to be assaulted at school and 2.4 times more likely to miss school due to fear of victimization when compared to their heterosexual counterparts (Friedman et al., 2011). Furthermore, peer victimization at school has been associated with worse academic outcomes and low self-esteem (Kosciw, Palmer, Kull, & Greytak, 2013). In a report on the findings from the 2014 General Social Survey (GSS), 31% of lesbian and gay Canadians and 39% of bisexual Canadians reported experiencing discrimination in the past five years compared to 13% of heterosexual Canadians. These individuals reported that discrimination most commonly occurred at work, about half the time, followed by at a bank, store, or restaurant. Similarly, the GSS from 2009 reported that 37.7% of LGB employees who were "out" at work experienced some form of discrimination, 38.2% experienced harassment, and 9.2% reported losing a job (Sears & Mallory, 2011). Workplace discrimination has been associated with adverse mental and physical outcomes, as well as poor job-related outcomes (Waldo, 1999). The 2014 GSS survey also found that LGB Canadians reported experiences of violent victimization, including sexual assault, robbery, and physical assault) at a significantly higher rate than heterosexual Canadians even after controlling for age, history of childhood abuse, history of homelessness, visible minority status, and marital status. For example, the rate of violent victimization for heterosexual individuals was 69 incidents per 1,000 population. For lesbian and gay Canadians the rate was 142 events per 1,000 and for bisexual Canadians the rate was 267 events per 1,000. The survey also found that women were significantly reporting greater rates of violent victimization compared to men. Thus, LGBTQ+ women, and particularly bisexual women, are at a significantly greater risk for violent victimization in Canada.

An LGBTQ+ person's *expectations of rejection* (or chronically fearing and expecting negative experiences due to one's sexual orientation or gender identity) and more generally, rejection sensitivity, have been associated with depressive symptoms, social anxiety, and psychological distress (Feinstein, Goldfried, & Davila, 2012; Meyer, 2013). It is important to note that the ongoing fear of potential rejection and the distrust that, despite what others say, others do not fully 'accept' the LGBTQ+ individual, is not misguided; expecting rejection is an understandable response and adaptive coping mechanism given the frequency sexual minority individuals do experience rejection, discrimination, and prejudice.

*Vicarious trauma* is a common occurrence for LGBTQ+ people; LGBTQ+ people highly value community and connections with other LGBTQ+ people, thus it is inevitable that experiences of discrimination are regularly repeated to other group members in order to heal and connect with one another. However, vicarious trauma has been associated with depression, anxiety, PTSD, and perceived stress (Balsam, Beadnell, & Molina, 2013). Additionally, highly publicized homophobic hate crimes often have a ripple effect within LGBTQ+ communities. After the Orlando Pulse Nightclub tragedy in 2016, Stults and colleagues (2017) found that LGBTQ+ individuals who were not involved first-hand in the shooting experienced increased concerns surrounding personal safety following the mass shooting at the historically gay nightclub. Furthermore, they found that those with multiple minority identities (e.g., women, trans and genderqueer individuals, bisexual, and queer participants) had greater safety concerns than those with, comparably, more privilege (e.g., gay, male identity). A qualitative analysis of LGBTQ+ graduate students' responses in a virtual discussion regarding the Orlando shooting revealed many intense emotional reactions. Specifically, participants reported feeling sadness, anger, fear, shock, numbness, and experiencing a mix of several emotions after learning of the

attack. Additionally, students discussed feeling further isolated in heterosexual spaces when experiencing vicarious trauma in the days following the shooting.

*Internalized homophobia* has been significantly associated with relationship problems and strain (Frost & Meyer, 2009). The association between internalized homophobia and subsequent relationship problems may be due, in part, to the mediating role of depressive symptoms (Frost & Meyer, 2009). One study using a 14-day daily diary method found that the impact of internalized homophobia on intimate relationships may be related to daily stress (Totenhagen, Randall, & Lloyd, 2018). For example, Totenhagen et al. found that when individuals with high self-reported levels of internalized homophobia experienced a stressful day, they also reported higher levels of relationship conflict and lower relationship quality. The association was not found for individuals reporting low levels of internalized homophobia. Additionally, internalized homophobia has been associated with insecure attachment styles, which may in turn impact relationship quality and/or potential violence (Sherry, 2007). For example, Sherry (2007) found fearful (low self-esteem and low trust in others) and preoccupied (low self-esteem but high trust in others) attachment styles were associated with internalized homophobia. Currently, pervasive societal messages dictate that holding an LGBTQ+ identity somehow equates moral deviance, being biologically or genetically compromised, and/or, at best, having a sexual orientation that is less ideal than a heterosexual orientation. Thus, the internalization of these negative messages (e.g., internalized homophobia) may impact an individual's cognitive working model, or representation of themselves and themselves in relation to others (Bowlby, 1982), subsequently impacting their attachment tendencies.

*Outness,* or the degree to which someone's identity as a sexual minority is concealed, often serves a protective purpose for LGBTQ+ people living in environments that are not safe

enough, or not perceived to be safe enough to disclose one's minority status. Unfortunately, being 'closeted' has been hypothesized to hinder interpersonal relationships, decrease social support and connectedness, and negatively impact other physical and mental health outcomes (Frost & Meyer, 2009). However, mixed findings exist with regard to the impact of outness on intimate relationships. Some researchers have suggested being out regarding one's sexual orientation positively influences relationship quality (Clausell & Roisman, 2009; Knoble & Linville, 2012; LaSala, 2000). However, others have found no association (Balsam & Szymanski, 2005; Beals & Peplau, 2001; Green, 2000). Some researchers believe that coming out (i.e., increased outness) may positively impact intimate relationships by increasing self-esteem, validating the couple's relationship, and decreasing isolation from the secrecy involved in hiding one's relationship (Balsam & Szymanski, 2005). Outness has also been associated with greater community connectedness and greater perceived support regarding one's identity (Dentato, Craig, Messinger, Lloyd, & McInroy, 2014; Frost & Meyer, 2009). Given the mixed findings of such research, some researchers have examined other factors that may impact the relationship between outness and relationship quality. For example, Totenhagen and colleagues (2018) study examined how daily stress may impact this relationship. The researchers found when an individual was low on outness (but not when individuals were high on outness) and their partner reported having a stressful day, the partner with low outness reported lower levels of commitment. Furthermore, Balsam and Szymanski (2005) speculated that perhaps it is the match or mismatch between the two partner's level of outness that actually impacts relationship quality (e.g., decreased relationship quality may be associated with a partner pairing where one partner is more out than the other). Overall, keeping secrets and concealing stigmatized identities has generally been found to be associated with worse health outcomes, whereas

revealing important aspects of oneself and disclosing emotional experiences have been associated with improvement in physical and mental health outcomes (Pachankis, 2007; Pennebaker, 1995; Stiles 1995).

Although minority stress is the term originally coined for the well-documented, significant, and chronically high levels of stress faced by sexual minority individuals, members of any stigmatized minority group face prejudice and discrimination which can result in increased stress. That said, it is pertinent to consider how gender identity, sexual orientation, race, (dis)ability, and SES may intersect to impact minority stress as well as attachment and IPV.

Previous research had found that even one's experience of sexual minority stress differs based on race/ethnicity due to experiences of racism (Everett, Steele, Matthews, & Hughes, 2019). For example, for White sexual minority women, masculine traits and presentation were associated with higher levels of victimization, discrimination, and stigma consciousness. On the other hand, masculinity was associated with lower levels of victimization, discrimination, and stigma consciousness for Black and Latina women who identified as a sexual minority (Everett et al., 2019).

Another study included 296 self-identified lesbian, gay, and bisexual adults to determine whether race/ethnicity and SES were related to experiences of minority stress (Shangani, Gamarel, Ogunbajo, Cai, & Operario, 2019). Black and Latino sexual minority adults experienced greater anticipated stigma (in this study, defined as the amount a sexual minority individual anticipated rejection or discrimination based on their sexual orientation) compared to White sexual minority adults. Similarly, the association between SES and minority stress differed for adults of different races/ethnicities. Specifically, a higher SES meant more enacted stigma (in this study, measured by the Everyday Discrimination scale which assesses the

frequency of discriminatory experiences) for Black sexual minority adults whereas a higher SES meant lower enacted stigma for White sexual minority adults (Shangani et al., 2019).

Hayes (2011) found that among racialized and sexual minority students seeking services at a university counselling centre, racial/ethnic minority clients reported significantly higher levels of depression, hostility, family distress, and academic distress. Sexual minority clients reported higher scores related to depression, disordered eating, generalized anxiety, hostility, family distress, and social anxiety compared to heterosexual clients (Hayes, 2011). When examining how race and sexual orientation intersect, measures of psychological distress were not significantly higher for racial/ethnic sexual minorities compared to White sexual minorities. Racial/ethnic sexual minorities did rate their psychological distress as higher when compared to heterosexual racial/ethnic minorities (Hayes, 2011). Thus, although the research is mixed as to how outcomes differ for LGBTQ+ racial/ethnic minorities compared to White LGBTQ+ individuals, it is important to consider how an individual's various identities (e.g., race/ethnicity, age, (dis)ability, socioeconomic status, etc.) intersect to differentially impact their experiences of minority stress and discrimination as well as opportunities and privileges.

**Minority stress as a risk factor for IPV.** Several facets of minority stress have been associated with IPV; Balsam and Szymanski (2005) found that internalized homophobia was significantly associated with lifetime physical and sexual partner violence victimization in women's same-gender relationships ($r$ = .12, small effect size). Additionally, internalized homophobia was significantly associated with intimate partner physical and sexual violence victimization ($r$ = .22, small to medium effect size) and perpetration ($r$ = .19, small to medium effect size) within the last year. Lifetime experiences of discrimination were significantly associated with psychological aggression perpetration and victimization ($r$ = .30, medium effect

size). Lastly, lifetime discrimination was associated with sexual and physical violence perpetration ($r = .20$, small to medium effect size) and victimization ($r = .18$, small to medium effect size). Ristock and Brownridge (2011) interviewed seven women who experienced violence in a same-gender relationship. Three women identified as lesbian, two as bisexual, and two as preferring not to label their sexual orientation. Five women self-reported as having a disability, five women were Aboriginal, and two women were white. Five women were unemployed or on disability and two women were working. Given the diversity in the women's demographics, oppression and privilege intersected and impacted IPV uniquely for each woman. Ristock and Brownridge asked women about risk factors for violence in their situations. The women identified individual and partner characteristics (such as low self-esteem, substance abuse, abuse history, mental illness history). The women also identified structural and contextual factors impacting the IPV (e.g., poverty, racism, disability). The women also identified how privileges such as employment and education increased access to resources such as counselling. The women also described many ways LGBTQ+ based oppression impacted their experience of IPV. For example, women described 'outness' as having a significant impact on the relationship dynamic (e.g., the individual perpetrating the abuse fearing that their partner's outness would subsequently out them or the individual perpetrating the abuse threatening to 'out' their partner) and also impacting their social support (e.g., the women could not speak of the abuse to receive support from friends and family when their supports do not know they are in a relationship with a woman). Additionally, systemic heterosexism reduced access to formal services (e.g., being refused entrance to a shelter because the abusive partner is a woman and having difficulty obtaining a restraining order because the abusive partner is female or the woman filing the order is afraid of being outed).

Beyond examining the direct impact of LGBTQ+ discrimination on IPV in women's same-gender relationships, it may also be important to consider how minority stress influences established risk factors for IPV. The existing research demonstrates minority stress is associated with perpetration and victimization of IPV within the women's same-gender relationships, however the many mechanisms that play a role in this association continue to be explored.

**The impact of minority stress on risk factors for IPV.** In many ways, IPV in women same-gender couples mirrors violence in heterosexual relationships. Similar to heterosexual individuals, women of colour, those with less education, those with experiences of childhood abuse, and those who report exposure to IPV in their family of origin, are most likely to report experiences of IPV perpetration and/or victimization (Baslam & Szymanski, 2005; Fortunata & Kohn, 2003; McKenry et al., 2006). Similar to heterosexual couples, insecure attachment is a risk factor for both intimate partner perpetration and victimization in women's same-gender relationships (McKenry et al., 2006). Women in same-gender relationships who perpetrate violence too report greater levels of recent relationship stress than non-perpetrators (McKenry et al., 2006). Similarly, lower relationship satisfaction is associated with aggression and physical violence in women's same-gender relationships (Lewis et al., 2017). Again, similar to in heterosexual couples, alcohol use is associated with physical violence and psychological aggression in women's same-gender relationships (Klostermann, Kelley, Milletich, & Mignone, 2011; Lewis et al., 2017; Lewis et al., 2011).

Thus, although several risk factors for IPV in women same-gender couples are the same as they are for heterosexual couples, even these risk factors merit unique consideration of why and how they function for sexual minority individuals. Specifically, minority stress exacerbates all of the aforementioned risk factors (for example, living in a heterosexist world and

consequently experiencing instances of prejudice on a regular basis increases life and psychological stress, leading to increased substance use for many LGBTQ+ women). Greater rates of psychopathology and alcohol use have consistently been established as health disparities sexual minority women face (Kerridge et al., 2017). Sexual minority women have been found to drink more often, drink greater amounts, and drink to intoxication more than heterosexual women (Wilsnack et al., 2008). More specifically, lesbian women reported greater rates of 12-month and lifetime substance use disorders (alcohol and nicotine use), depressive disorders (major depressive disorder and persistent depressive disorder), anxiety disorders (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, PTSD) and personality disorders (borderline and schizotypal personality disorder as well as aggressive, antisocial, borderline and paranoid personality traits; Fortunata & Kohn, 2003). Bisexual women were also at greater risk for substance use and all psychiatric disorders assessed by the diagnostic interview (NIAAA Alcohol Use Disorder and Associated Disabilities Interview Schedule-5). Women who reported that they were unsure of their sexual orientation were also at greater risk of experiencing a substance use disorder and all psychiatric disorders assessed (other than persistent depressive disorder and specific phobias) within the past 12 months compared to heterosexual women. The higher prevalence of psychiatric disorders in sexual minority individuals is no coincidence; minority stress is a critical risk factor for substance use and mental health problems (Goldbach, Tanner-Smith, Bagwell, & Dunlap, 2014). For example, victimization related to one's sexual identity, has been consistently associated with substance use and psychological disorders such as depression and PTSD in sexual minority youth (Goldback et al., 2014; Mustanski, Andrews, & Puckett, 2016; Willoghby, Doty, & Malik, 2010).

Furthermore, experiencing negative reactions upon coming out is associated with greater substance use in sexual minority young people (Goldbach et al., 2014). A sexual minority identity also exacerbates other risk factors for IPV; internalized homophobia is associated with greater relationship dissatisfaction (Balsam & Szymanski, 2005). Additionally, sexual minority individuals are at a greater risk of experiencing childhood sexual and physical abuse, which are also correlated with attachment insecurity and IPV (Friedman et al., 2011). Lastly, minority stress may impact attachment insecurity for LGBTQ+ women, which may subsequently impact IPV (Cook & Calebs, 2016; Sherry, 2007); although the impact of minority stress on attachment insecurity needs further clarification. Specifically, examining how minority stress may be associated with anxious versus avoidant attachment strategies in LGTBQ+ women may be useful. Furthermore, the association between attachment and IPV should be examined for women in same-gender relationships.

**Minority Stress, Attachment, and IPV**

Attachment theory suggests that people create expectations of themselves and others based on their early life experiences, and largely the experiences with their primary caregiver (Bowlby, 1982). Specifically, Bowlby proposed that children develop different styles of attachment based on the patterns of interactions they have with their caregiver. Unlike childhood models of attachment, which focus predominantly on the parent-child relationship, adult attachment styles, which encompass more broadly how people approach their romantic relationships, are also of interest to researchers examining IPV (Fraley, Hudson, Heffernan, & Segal, 2015). Bartholomew and Horowitz (1991) developed a categorical model of attachment which included four distinct attachment styles: *secure attachment* (positive self-view and comfort with both intimacy and independence), *dismissing attachment (*positive self-view and

low in dependence and trust in others), *preoccupied attachment* (low self-esteem and high trust and dependency on others), and *fearful attachment* (low in self-esteem and trust and dependency on others). However, more recently, research suggests attachment may be better conceptualized as dimensional rather than categorical (Fraley, Hudson, Heffernan, & Segal, 2015). Securely attached individuals generally project autonomy and self-confidence; they are not entirely independent or over-dependent on others (Johnson, 2012). Someone who is insecurely attached will characteristically view significant others as unpredictable and believe they are unworthy of love and support. Insecurely attached individuals can utilize different attachment strategies within their significant relationships (Johnson, 2012). For example, someone who is primarily anxiously attached is highly fearful of abandonment and rejection. Although they are highly dependent on and strongly desire the unconditional acceptance and love of others, they may continuously question this acceptance and love (Fraley et al., 2011; Johnson, 2012). Someone who is primarily avoidantly attached may withdraw from significant relationships and generally feel uncomfortable with intimacy and dependency. Fear and uncertainty are theorized to activate one's primary attachment strategies (Johnson, 2012). For example, when one feels threatened and unsure, they will resort to their typical pattern of attachment (anxious or avoidant strategies). Additionally, when someone is insecurely attached, they may interpret some relatively benign interpersonal problems as more threatening than a securely attached individual might.

Ample research has demonstrated an association between insecure attachment and IPV in both male and female perpetrators in both heterosexual and same-gender couples (Godbout, Dutton, Lussier, & Sabourin, 2009; McKenry, Serovich, Mason, & Mosack, 2006). Godbout and colleagues (2009) demonstrated that the association between insecure attachment (both anxious

and avoidant) and IPV (both physical and psychological) was significant for heterosexual couples, with effect sizes ranging from small to medium.

There are several different reasons attachment insecurity may be linked to IPV. Some theories suggest that insecure attachment alters how an individual views and evaluates threats to their relationship, which subsequently increases the risk for IPV (Dutton & White, 2012). For example, if an individual is anxiously attached, they may view smaller slights or 'signs' (e.g., lack of eye contact) as indicators of a very severe threat to the relationship, whereas someone who is securely attached may interpret the same signal as an indicator as something far more benign (e.g., their partner is tired or distracted). The greater likelihood of perceiving threats and the heightened interpretation of those threats to the relationship may put individuals at risk for acting violently or in a controlling manner in order to avoid real or imagined abandonment (Dutton & White, 2012). Other research suggests that it is the mismatch in partner attachment styles that increases the risk for IPV (Doumas, Pearson, Elgin, & McKinley, 2008). Theoretically, intimate partner violence can be conceptualized as, in part, the result of differential needs regarding closeness and distance (Doumas et al., 2008). In Doumas and colleague's study, when the male's attachment style was highly avoidant and the woman's attachment style was highly anxious, reported physical intimate partner violence was greatest. Thus, when this couple is under stress, she may pursue closeness and comfort to meet her needs while he may attempt to meet his by avoiding or escaping the situation. For someone who is highly anxiously attached, this may trigger fears of abandonment and rejection and cause her to more unremittingly continue to pursue closeness. For someone who is highly avoidantly attached, this pursuit of closeness may trigger feelings of panic and intense discomfort at the sought intimacy and dependence, which may cause him to lash out physically or psychologically

when he is unable to escape the situation. Lastly, early theories examined anger as a correlate of insecure attachment, such that anger is viewed as a natural reaction to threats to the attachment system and may also be associated with increased risk for IPV (Bowlby, 1982). Higher levels of trait anger have been associated with insecure attachment styles (Troisi & D'Argenio, 2004). However, some studies have found more significant correlations between anger and some but not all types of insecure attachment. For example, in some studies, only a fearful attachment style (high in avoidance and anxiety) has been significantly positively correlated with anger (Dutton, Saunders, Starzomski, & Bartholomew, 1994).

Although it is clear that attachment is a pertinent risk factor for IPV, further research is needed to determine how attachment differs for sexual minority women and how attachment may serve as a risk factor for IPV in women same-gender couples. It is possible that the social stress associated with sexual minority status impacts one's attachment functioning across the lifespan (Cook & Calebs, 2016). Although the attachment system has strong foundations in childhood and early attachment is believed to be correlated with adult attachment, the role of parental attachment figures continually decreases across the lifespan (Cook & Calebs, 2016). Additionally, according to Cook and Calebs, the minority stress individuals experience throughout development likely has a profoundly negative impact on the stability of their attachment strategies between childhood and adulthood. It is likely that attachment systems are continually shaped throughout life as new and important relationships are formed for all individuals, but perhaps especially sexual minorities (Sherry, 2007). The more intense and salient the relationship or interpersonal event, the greater its impact on attachment insecurity (Sherry, 2007). Thus, as LGBTQ+ individuals typically experience intense and salient interpersonal experiences, dynamics, and events due to minority stress (which could include

coming out, prejudice, familial rejection, victimization) it is possible that these events are shaping LGBTQ+ individual's attachment strategies. Furthermore, it is possible that individuals with secure attachment during childhood may shift to insecurely attached in adolescence and adulthood as one develops and more openly identifies as a sexual minority and subsequently begins to experience greater minority stress. On the other hand, feeling a sense of belonging through membership within one's LGBTQ+ community is sometimes valued as of similar importance to how familial relationships are valued for heterosexual individuals. Thus, these communities and the relationships within these communities may serve as protective factors for attachment security.

Despite the theoretical rationale that one's sexual orientation and subsequent experiences may impact their attachment security, there is a deficit in reporting sexual orientation status in attachment research (Cook & Calebs, 2016; Mohr, Selterman & Fassinger, 2013). The little research that does examine how attachment security may differ for sexual minority individuals is certainly mixed. Ridge & Feeney (1998) found similar levels of attachment insecurity among sexual minority individuals compared to heterosexual individuals. However, their findings did indicate that women in same-gender relationships reported lower attachment anxiety and higher attachment avoidance, which is contrary to findings in heterosexual women (Ridge &Feeney 1998; Mohr et al., 2013). Mohr (2008) suggested that this differing pattern in attachment for LGBTQ+ women may be related to divergence from gender roles in these women (e.g., greater value placed on independence and assertiveness). Other research suggests that factors associated with minority stress likely negatively impact attachment insecurity. For example, Sherry (2007) found that preoccupied and fearful attachment styles (which both have negative self-views) were positively associated with internalized homophobia, shame, and guilt. Cook et al. (2018) also

examined changes in attachment from childhood to adulthood among young black gay and bisexual men. Cook et al. (2018) found that those who moved from securely attached in childhood to insecurely attached in adulthood typically reported rejection by their parental figure during adolescence related to their disclosure regarding their sexual minority status. Those who transitioned from insecurely attached during childhood to securely attached during adulthood may have lacked an attachment figure during childhood and gained one during adolescence (Cook et al., 2018). A recent study by Keating and Muller (2020) found that for LGBTQ+ adults who reported a history of trauma related to sexual orientation discrimination had higher levels of attachment avoidance and attachment anxiety compared to LGBTQ+ adults who did not report any discrimination related trauma.

Although there is sparse evidence directly citing the link between homophobia/transphobia and attachment insecurity, there is ample research suggesting traumatic experiences in general are related to an individual's attachment security (Bilfulco et al., 2006; Fowler, Allen, Oldham, & Frueh, 2013). LGBTQ+ individuals are more likely to experience other forms of trauma not related to their sexual orientation or gender identity. For example, LGBTQ+ adults are at greater risk than heterosexual adults for traumatic life experiences such as childhood physical, sexual, and psychological abuse (Balsam, Rothblum, & Beauchaine, 2005; Corliss, Cochran, & Mays, 2002). It is theorized that LGBTQ+ individuals experience childhood abuse at higher rates than heterosexual children because they are targeted due to their sexual minority identity (Balsam et al., 2005). LGBTQ+ adults have also been shown to be at higher risk of interpersonal violence, someone close to them dying, and a loved one experiencing trauma compared to heterosexual adults (Roberts et al., 2010). Given the evidence that

LGBTQ+ people are at a higher risk for traumatic life experiences, it is possible LGBTQ+ experience greater attachment insecurity as a result of these interpersonal traumas.

Beyond a greater likelihood of experiencing childhood abuse and other forms of trauma, researchers are asserting that minority stress and oppression in and of themselves are traumatic life experiences. The DSM-5 defines traumatic events as “exposure to actual or threatened death, serious injury, or sexual violence” through experiencing this directly, witnessing it, learning it occurred to a loved one, or experiencing repeated or extreme exposure to details about the event (American Psychiatric Association, 2013, page 271). However, recently researchers and clinicians have been advocating for other forms of insidious trauma, such as oppression, to be included in the definition of traumatic events (Bandermann & Szymanski, 2014; Bryant-Davis & Ocampo, 2005; Carter, 2007; Keating & Muller, 2020). LGBTQ+ based discrimination that qualifies within the DSM-5’s current definition of ‘trauma’ (e.g., sexual orientation-based violent or sexual hate crime victimization) has been consistently associated with increased post-traumatic stress symptoms in LGBTQ+ individuals (Bandermann & Szymanski, 2014). However, research has also found insidious interpersonal trauma, such as minority stress and systematic oppression, have a similar effect (Bandermann & Syzmanski, 2014; Keating & Muller, 2020). Bandermann and Szymanski (2014) found that amongst 423 LGB adults, both sexual-orientation based hate crimes and heterosexist discrimination (e.g., heterosexist harassment, discrimination, and rejection) were associated with PTSD symptoms. Similarly, Keating and Muller (2020) found amongst 157 LGBTQ+ adults, LGBTQ+ based trauma (e.g., other traumatic events causally attributed to one’s sexual orientation) was associated with PTSD symptoms, dissociation, and emotion dysregulation. It is clear that minority stress rooted in systemic oppression is traumatizing for LGBTQ+ people; thus, in viewing oppression as trauma,

it is possible that minority stress, in the form of discriminatory experiences and/or internalized homophobia, is significantly associated with attachment for LGBTQ+ people. However, as there is little research examining the association between oppression and minority stress, or even reporting attachment security in LGBTQ+ women in same-gender relationships, further research clarifying attachment differences and links with minority stress is pertinent.

## Objectives of the Current Study

The current study sought to further elucidate the relationship between two types of minority stress (e.g., discrimination and internalized homophobia), attachment security, and IPV in women who are in same-gender relationships. Successively, the goals of the proposed study are to: 1) Examine the relationship between minority stress and intimate partner physical and psychological violence and coercive control violence; 2) Examine the association between minority stress (internalized homophobia and everyday experiences of heterosexism) and adult attachment; 3) Examine the relationship between adult attachment and IPV perpetration and victimization and; 4) Examine attachment as a mediator for the relationship between minority stress and IPV.

General predictions between core variables will be made here; more specific associations between subscales (e.g., how internalized homophobia is related to attachment anxiety, attachment avoidance, IPV perpetration, and IPV victimization) will be exploratory in nature. Additionally, I will examine differences in rates of IPV, attachment insecurity, and experiences of minority stress amongst different LGBTQ+ identities and self-identified ethnicities. The study will also examine how the onset of the COVID-19 pandemic may have impacted the study's core variables. General predictions will be made and more specific associations between added items will be exploratory in nature. The study will examine the following hypotheses:

## Hypotheses

### Goal One: Minority Stress and IPV

1. **Hypothesis one:** Intimate physical and psychological violence and coercive control perpetration is expected to be associated with victimization. Physical, psychological, and coercive control forms of IPV are expected to be positively correlated.
2. **Hypothesis two:** Internalized homophobia and experiences of heterosexism and discrimination are expected to be associated with higher levels of physical IPV.
3. **Hypothesis three:** Internalized homophobia and experiences of heterosexism and discrimination are expected to be associated with higher levels of psychological IPV.

### Goal Two: Minority Stress and Attachment

4. **Hypothesis four:** It is expected that minority stress will be associated with greater attachment insecurity. However, the relationship between experiences of discrimination and internalized homophobia and specific styles of attachment (e.g., avoidance and anxiety) will be exploratory in nature.

### Goal Three: Adult Attachment and IPV

5. **Hypothesis five:** Attachment avoidance and anxiety are expected to be associated with higher self-reported physical IPV perpetration and victimization.
6. **Hypothesis six:** Attachment avoidance and anxiety are expected to be associated with higher self-reported psychological IPV perpetration and victimization.

### Goal Four: Attachment as a Mediator of the relationship between Minority Stress and IPV

7. **Hypothesis seven:** Attachment avoidance is expected to partially mediate the relationship between minority stress and IPV.

8. **Hypothesis eight:** Attachment anxiety is expected to partially mediate the relationship between minority stress and IPV.

## Additional COVID-19 Related Hypotheses

Prior to beginning data collection, the COVID-19 pandemic and related restrictions (e.g., physical distancing, stay at home orders, and similar protocols) began. To determine whether the pandemic and related restrictions impacted minority stress, attachment, or IPV, additional questions were added to the study to evaluate the following hypotheses:

9. **Hypothesis nine:** An increase in psychological symptoms (anxiety, sadness, grief and loneliness) since the onset of the COVID-19 pandemic and related restrictions is expected to be associated with an increase in IPV since the pandemic onset.
10. **Hypothesis ten:** An overall increase in stress related to the COVID-19 pandemic is expected to be associated with an increase in IPV since the pandemic onset.
11. **Hypothesis eleven:** Attachment security is expected to be associated with feelings of closeness to one's partner increasing after the onset of the COVID-19 pandemic.

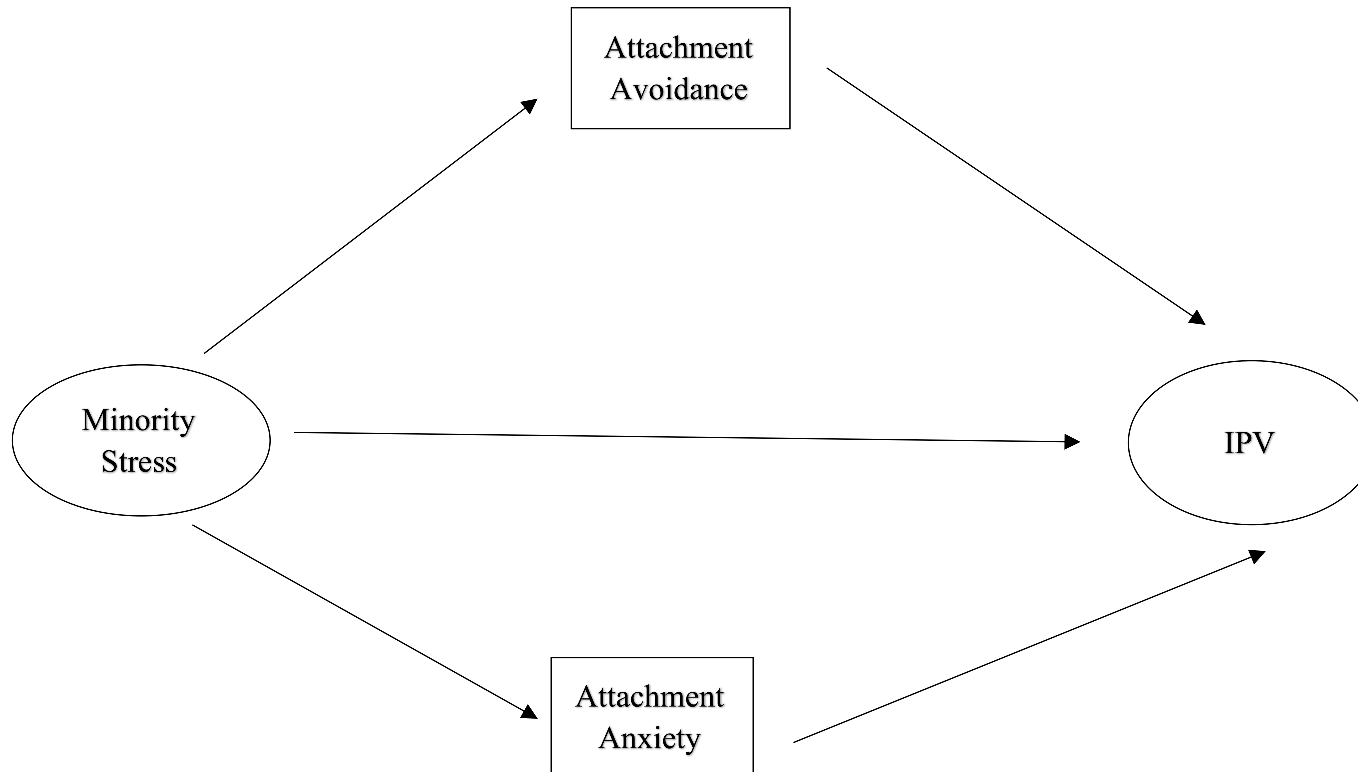


*Figure 1.* Parallel mediation model of minority stress (internalized homophobia and experiences of discrimination), insecure attachment, and intimate partner violence (physical, psychological, and coercive control) victimization and perpetration.

# Method

## Participants

The Human Research Ethics Board at the University of Victoria approved the study, which attained a sample of 64 participants currently in a same-gender romantic relationship who self-identify as LGBTQ+ women between the ages of 19 to 57 (*M* = 30.41, *Mdn* = 27). To participate in the study, the participants had to be 19 years of age or older, identify as women, speak English, and live in Canada or the United States. Participants also had to be in a in a same-gender relationship with a partner they had been with for three months or longer. Non-probabilistic sampling was used to recruit exclusively LGBTQ+ identified women who were currently in a same-gender romantic relationship. The participants in the sample were primarily Caucasian (78%), Lesbian or Gay (45%), and currently residing within Canada (67%). Additionally, 56% of participants had a personal income of over $50,000 a year. More detailed demographic characteristics of the sample are presented in Table 1.

Several different methods were used for recruitment, including crowdsourcing website Mechanical Turk (MTurk), which provides a large pool of potential research participants who complete surveys for a small fee. Advertisements for the study were also placed on online LGBTQ+ forums on the website Reddit (e.g., r/ainbow, r/lgbt, r/bisexual, r/RightwingLGBT, r/LesbianActually), on posts on LGBTQ+ meetup groups (e.g., Island Lesbian Social, Lesbian/Bi/Queer Women 20-40 of Victoria), and on LGBTQ+ organization's websites, newsletters, and social media pages. Additionally, snowballing was used as a recruitment message (i.e., individuals who completed the survey were asked to pass on the survey link to individuals they know who may be interested in participating and who meet the eligibility criteria). Five participants indicated they saw the study announcement on MTurk, four

participants indicated found it on Reddit pages, 34 participants indicated they found the study from various social media pages (e.g., Victoria PRIDE twitter, Facebook LGBTQ+ groups, Get REAL Instagram post), two participants found the study in the QMunity newsletter, four participants found the study on a psychology research collection page, and 19 participants reported being sent the link personally from someone they knew.

In exchange for participant's time and effort, they were offered the opportunity to enter a prize draw with about 10 chances to win either a $10, $15, or $20 gift certificate to Amazon.ca or Amazon.com depending on their country of residence. Alternatively, they could request we make a donation of 5$ to the International Lesbian, Gay, Bisexual, Trans, and Intersex Association (ILGA). The option to have the researchers donate to the ILGA is available up to a total donation of $200; if this was reached, only the prize draw was available. Twenty-four participants choose to donate 5$ to the ILGA for a total donation of $120. Thirty-four participants choose to be entered in the draw to win a gift certificate to Amazon and 54 participants did not respond to whether they would like to make a donation or enter into the draw. Five $10 gift cards, three $15 gift cards, and two $20 gift cards were emailed to 10 of the 34 participants who entered to win, meaning there was better than a one in four chance of winning a gift card.

**Procedure**

The information for this study was posted on the online crowdsourcing website, Figure Eight, on LGBTQ+ specific threads on the website Reddit, on local LGBTQ+ meetup groups, and the link was passed on via snowballing by participants who knew individuals who may be interested and who meet the eligibility criteria. The study announcement included the intention of the study: "to examine associations between discrimination and interpersonal experiences in

women's same-gender relationships." The announcement also states the inclusion criteria of the study (e.g., "the study is seeking women who identify as LGBTQ+ and are currently in a same-gender relationship with a partner they have been with for three months or longer."). Additionally, participants were informed that their responses will be confidential and anonymous. Individuals who chose to click on the link within the study announcement were directed to a detailed letter of information to read prior to beginning the questionnaires on the website SurveyMonkey (see Appendix B). The letter included information about the purpose of the study, their ability to withdraw from participating at any time, the anonymity and confidentiality of their identity and answers, the nature of the sensitive topics covered, potential benefits to participation, and compensation. Participants were told "by clicking '**next**', you will be indicating you have read and understand the above information and agree to participate in this research study." Upon completion of the study, participants viewed an online debriefing form with further information regarding the purpose of the study, instructions to access the results in the future, additional resources if they feel distressed, and the researchers' contact information should they have any unanswered questions.

## Measures

**Demographic questionnaire.** Descriptive information about the sample were collected using several questions about age, gender identity, sexual orientation, relationship status, relationship length, primary language, ethnicity, education, parental education, and income.

**Lesbian Internalized Homophobia Scale – Short Form Version (S-LIHS).** Internalized homophobia in lesbian women was assessed using Piggot's (2004) short form of Szymanski and Chungs (2001) Lesbian Internalized Homophobia Scale. The S-LIHS consists of 39-items about the extent to which lesbian women have internalized society's negative view of

LGBTQ+ people. The S-LIHS includes five subscales with items measured on a seven-point likert scale from 1 (*strongly disagree)* to 7 (*strongly agree*)). One overall score and five subscale scores were calculated by summing the items for each subscale, with higher scores denoting a greater degree of internalized homophobia. Average scores were also calculated for each subscale by dividing the total score by the number of items on each subscale. The five subscales are: 1) *Public identification as a lesbian* (e.g., "I try not to give signs that I am a lesbian. I am careful about the way I dress, the jewelry I wear, and the place, people, and events I talk about."); 2) *Connection with lesbian community - Interaction* (e.g., "Being a part of the LGBTQ+ community is important to me"); 3) *Connection with lesbian community – Knowledge of resources* (e.g., "I am familiar with community resources for lesbians (i.e., bookstores, support groups, bars, etc.)."); 4) *Personal feelings about being a lesbian* (e.g., "I hate myself for being attracted to other women"); 5) *Attitudes toward other lesbians* (e.g., "Lesbians are too aggressive."). In the current study, the questions were re-worded to include women in a same-gender relationship that don't necessarily identify as lesbian. For example, the original question: "I am not worried about anyone finding out that I am a lesbian," was changed to: "I am not worried about anyone finding out that I am a LGBTQ+ person."

The original S-LIHS study had a sample of 803 women recruited online and through snowball sampling. Participant's ages ranged from 18 to 90 ($M$ = 34.8 years) and the sample was cross cultural with participants from 20 different countries. The majority of the participants indicated their romantic partners were exclusively other women and 17% of the sample indicated their romantic partners were "mainly women." The alpha coefficients for each of the five subscales, and the overall scale, were similar to the original LIHS and were adequate (e.g., alpha for the overall S-LIHS scale was .93 which was similar to the overall alpha reported by

Szymanski and Chung (2001) ($\alpha$ = .94). Additionally, the reliability of the subscales and total scale of the S-LIHS were highest for participants from the United States and Canada (Piggot, 2004). The S-LIHS was also significantly correlated with other expected related variables (e.g., depression, self-esteem, psychosexual adjustment; Piggot, 2004). In the current sample, the S-LIHS total score was the only score from the S-LIHS used as we were mainly interested in overall internalized homophobia and because the total score had excellent reliability ($\alpha$ = .92). Four subscales had acceptable reliability with alpha values ranging from .77 to .89 and one subscale (Feelings about being a LGBTQ+ woman) had poor reliability ($\alpha$ = .57).

**Daily Heterosexist Experiences Questionnaire (DHEQ).** Day to day experiences of minority stress were measured by the DHEQ (Balsam, Beadnell, & Molina, 2013). The DHEQ consists of 50-items measuring how LGBTQ+ populations experience a variety of different minority stressors. However, the current study included only 45-items as the HIV/AIDS subscale was removed as women have been shown to score significantly lower on this subscale than men (Balsam, Beadnell, & Molina, 2013). Participants respond on a distress scale (e.g., "how much has this problem distressed or bothered you during the past 12 months?") from 0 ("*did not happen/not applicable to me"*) to 5 ("*it happened, and it bothered me EXTREMELY")*. Scores are calculated by summing the items for an overall DHEQ score, and for nine subscales: *Gender Expression* (e.g., "feeling invisible in the LGBT community because of your gender expression"); *Vigilance* (e.g., "pretending that you have an opposite-sex partner"); *Parenting* (e.g., "your children being rejected by other children because you are LGBT"); *Harassment and Discrimination* (e.g., "being called names such as 'fag' or 'dyke'"); *Vicarious Trauma* (e.g., "hearing about hate crimes (e.g., vandalism, physical or sexual assault that happened to LGBT people you don't know)"; *Family of Origin* (e.g., "being rejected by your mother for being

LGBT"); *Victimization* (e.g., "being assaulted with a weapon because you are LGBT"); and *Isolation* (e.g., "difficulty finding LGBT friends"). Chronbach's alpha demonstrated acceptable internal reliability for the entire scale (.92) and for each subscale (ranging from .76 to .87). Relationships to other known correlates of minority stress was also demonstrated; higher scores on subscales of the DHEQ were correlated with greater emotional distress and perceived general LGBT discrimination (Balsam, Beadnell, & Molina, 2013). In the current sample, the DHEQ had excellent internal reliability for the entire scale ($\alpha$ = .90) and acceptable reliability for each subscale (ranging from .67 to .84).

**Experiences in Close Relationships - Revised Questionnaire (ECR-R).** Adult romantic attachment was assessed using the ECR-R (see Appendix F; Fraley, Waller, & Brennan, 2000). The ECR-R contains 36-items pertaining to how individuals feel in close relationships. These 36-items can be divided into two dimensions: attachment avoidance (model of others) and attachment anxiety (model of self). Both dimensions consist of 18-items measured on a scale ranging from 1 (*strongly disagree)* to 7 (*strongly agree).* Participants are instructed to answer based on how they feel with their current partner. Two sample items from the anxious dimension are "I'm afraid that I will lose my partner's love," and "My desire to be very close sometimes scares people away." Two sample items from the avoidant dimension are "I find it difficult to allow myself to depend on romantic partners," and "It helps to turn to my romantic partner in times of need." As recommended by Fraley et al. (2000), total scores were calculated using the mean of the 18 items for both the avoidance and anxiety dimensions.

Fraley et al., (2000) found high test-retest correlation for both the anxiety and avoidance dimensions (shared variance when anxiety and avoidance subscales were re-administered was between 93% and 95%). Total scores were the mean of the 18 items on each subscale, with a

range from 1 to 7 for each. A higher score is indicative of greater attachment anxiety or avoidance. Fraley (2012) found an average score of 3.56 for attachment anxiety and 2.92 for attachment avoidance in an online general population sample including over 12,000 women. Several studies have found that the ECR-R has good psychometric properties, external validity, and good test re-test reliability (Fairchild & Finney, 2006; Sibley, Fischer, & Liu, 2005; Sibley & Liu, 2004). Sibley and Liu (2004) found the ECR-R anxious and avoidant subscale ranges were evenly distributed and remained stable across a 6-week period. Fairchild and Finney (2006) found the ECR-R subscales correlated as expected with some related variables; the ECR-R avoidance subscale was associated with greater self-reported touch avoidance, greater loneliness, and less social support. The anxious subscale was associated with less self-reported social support, greater worry, and greater loneliness. In the current sample, the ECR had excellent internal consistency reliability for attachment anxiety ($\alpha$ = .94) and excellent internal consistency reliability for attachment avoidance ($\alpha$ = .95).

**The Revised Conflict Tactics Scale (CTS2).** The frequency of perpetration and victimization in intimate relationships will be assessed using a modified version of the CTS2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The CTS2 measures 39 perpetration and 39 victimization behaviours indicative of physical aggression (e.g., “Kicked, bit, or punched a partner”), psychological aggression (e.g., “insulted or swore at a partner”), negotiation strategies (e.g., “agree to try partner’s solution”), sexual aggression (e.g., “used force to make partner have sex”), and consequences of aggression (injury; e.g., “partner was cut or bleeding”) in married, cohabiting or dating couples. For the purposes of the current study, only the 20 items measuring the perpetration and victimization behaviours of physical aggression (12 items) and psychological aggression (8 items) were included (40 items total). Items are typically measured

on a scale ranging from 1 (*one time*) to 6 (*more than 20 times*) with the option to indicate if it never occurred or "*not in the past year, but has happened in the past*" (Straus et al., 1996). To create a total score for each scale, the number values corresponding to the responses chosen recommended by the authors were assigned (e.g., never = 0; one time = 1, two times = 2, three to five times = 4, six to ten times = 8, 11-20 times = 15 and more than 20 times = 25; Straus et al., 1996). Higher scores indicate a greater frequency of physical violence and psychological violence perpetration and victimization within the past year. The range of possible scores for the physical IPV perpetration and victimization is 0 to 300; the range of possible scores for psychological IPV perpetration and victimization is 0 to 200.

The validation of the CTS2 showed that all scales had good internal reliability, with alpha values of .79 or higher. Construct validity analyses demonstrated that the CTS2 scales were related to each other and to other expected correlates as expected, for example, there were higher correlations between physical and psychological aggression for men than for women. The CTS2 was validated for Canadian same-gender couples by Matte and LaFontaine (2011) who found the CTS2 to have good reliability and concurrent validity in same-gender couple relationships. This study also found that psychological and physical aggression were strongly correlated in same-gender couples. For LGBTQ+ women (N = 143), psychological IPV perpetration was significantly correlated with physical IPV perpetration and physical IPV victimization (Matte & LaFontaine, 2011). Psychological IPV victimization was also significantly correlated with physical IPV perpetration and physical IPV victimization for LGBTQ+ women in this study (Matte & LaFontaine, 2011).

For the purposes of the current study, the five items from Balsam and Szymanski's (2005) study measuring violence in women's same sex relationships were added to examine

LBGTQ+ specific methods of psychological aggression, as follows: "I threatened to tell my partner's employer, family, or others that she is lesbian/gay/bisexual," "I forced my partner to show physical or sexual affection in public, even though she didn't want to," "I used my partner's age, race, class, or religion against her," "I questioned whether my partner was a 'real' lesbian, gay, or bisexual woman," and "I told my partner she deserves what she gets because she is a lesbian, gay, or bisexual woman." Similar to the CTS2, these items were also reversed to ask participants whether their partner did this to them.

In the current sample, the total CTS2 score (both physical and psychological violence) was used to examine whether demographic variables were significantly associated with IPV to determine if any demographic variables should be used as covariates. This total CTS2 score had good internal reliability ($\alpha = .86$). The psychological victimization and psychological perpetration scores each had good internal reliability ($\alpha = .75$ and $\alpha = .71$, respectively. Psychological victimization and perpetration IPV were significantly correlated ($r = .88$, $p < .001$) and were therefore combined in the main analyses[1]. The total psychological victimization and perpetration score also had good internal reliability ($\alpha = .86$). The physical victimization and physical perpetration scores each had good internal reliability ($\alpha = .82$ and $\alpha = .71$, respectively). Physical victimization and perpetration IPV were also significantly correlated ($r = .85$, $p < .001$) and were therefore combined for simplicity in the main analyses. The total physical victimization and perpetration score had good internal reliability ($\alpha = .88$). The added LGBTQ+ violence items

[1] Preliminary analyses were conducted examining psychological and physical IPV with perpetration and victimization as separate variables. No differences were found whether the variables were analyzed separately or subsumed into one variable representing perpetration and victimization. Thus, for both psychological IPV and physical IPV one variable including both reported victimization and perpetration was used in the main analyses to streamline our findings.

did not have acceptable internal reliability ($\alpha$ = .24) likely due to very little variance, as three items were not endorsed by any participants.

**Coercive Control.** To assess coercive control in relationships, the Isolation and Emotional Control subscale from the Psychological Maltreatment Inventory (PMI; Kasian & Painter, 1992), which is a gender-neutral version of The Psychological Maltreatment of Women Inventory (Tolman, 1989), was used. The PMI consists of 60 items measuring men and women's experience of psychological abuse from their romantic partners. The Isolation and Emotional subscale has 13 items intended to measure control exerted by one's partner on a scale from 1 (*never*) to 6 (*more than 20 times)*. Items were scored using the same method suggested by the authors of the CTS2 (e.g., never = 0, more than 20 times = 25) as the authors of the PMI indicated they chose the same six point likert scale so that the CCS could be comparable to the CTS2. In the current study, the CCS was combined with the psychological victimization and perpetration scores on the CTS2 to make one variable representing overall psychological IPV, as significant correlations were found between these three subscales. Specifically, reported coercive control victimization was significantly correlated with psychological IPV perpetration ($r$ = .76, $p$ < .001), psychological IPV victimization ($r$ = .58, $p$ < .001), and the combined psychological IPV perpetration and victimization score ($r$ = .69, $p$ < .001). The total scores on three subscales were summed to create one score subsuming these three types of psychological violence in the participants' relationships. Total subscale scores are computed by summing responses across all items within the subscale. Two sample items are, "My partner tried to keep me from seeing or talking to my family," and "my partner blamed me for causing his or her violent behaviour."

Internal consistency reliability estimates for the Isolation and Emotional Control subscale were reported as good (ranging from $\alpha$ = .83 to .86) in several studies (Jenkins, 2002; Kaisan &

Painter, 1992; Simonelli & Ingram, 1998). Kaisan and Painter also found significant and expected relationships between the PMI and other known correlates; for example, the PMI was significantly correlated with greater psychological abuse from a partner and decreased overall relationship satisfaction in a sample of college aged men. Similarly, Simonelli and Ingram (1998) found further evidence of validity reporting significant correlations between social and emotional control and depression, verbal aggression, and physical aggression. In the present sample, the coercive control scale had good internal reliability ($\alpha$ = .84).

**COVID-19 measures.** To assess how the COVID-19 pandemic impacted variables of interest, additional items were developed and added to the study. Four items were added to assess how psychological functioning was impacted by the pandemic and related measures (e.g., physical distancing, work from home, business closures, isolation and quarantine recommendations, travel restrictions, etc.), called *COVID-19 Psychological Symptoms*. The four items assessed anxiety (e.g., "feeling anxious or nervous."), depressive symptoms (e.g., "feeling sad, down, uninterested in life, or depressed."), loss (e.g., "feelings of loss or grief."), and loneliness (e.g., "feelings of loneliness."). Participants were asked to indicate whether they had experienced a change in those feelings since the start of the COVID-19 pandemic and items were rated as 1(decreased), 2 (stayed the same) and 3 (increased). A total score for COVID-19 psychological symptoms was calculated using the mean of all four items. Thus, a score of 2 indicated that, overall, there was no change in these psychological symptoms since the start of the pandemic.

Six items were created to assess how the COVID-19 pandemic and related measures may have impacted relationship conflict and relationship stress (e.g., "General conflict in your relationship," and "stress or conflict over money, jobs, working from home"), called *COVID-19*

*Relationship Stress*. Participants were asked to indicate whether these types of stress or conflict had decreased (1), stayed the same (2), or increased (3) since the start of the pandemic. A total score for COVID-19 relationship stress items was calculated using the mean of all four items. Thus, a score of 2 indicated that, overall, there was no change in relationship conflict and stress since the start of the pandemic.

One item was created to assess how COVID-19 impacted feelings of closeness to one's partner, called *Feelings of Closeness*. This partner was also rated on a three-point scale: decreased (1), stayed the same (2), or increased (3) since the start of the pandemic.

Three items were created to assess how stress about COVID-19 illness impacted the participant's current relationship, called *COVID-19 Illness Stress*. The items included: "you or your partner's fears or worries about becoming ill," "You or your partner caring for each other or family members who have or are suspected of having the COVID-19 virus," and "You or your partner having a suspected or confirmed case of the COVID-19 virus." Participants rated these three items on a five-point scale: "no impact on my relationship" (1) to "a big impact on my relationship" (5). A total score for COVID-19 illness stress was calculated using the mean of all three items. Thus, a higher score indicated that, overall, fears of the illness, caretaking due to the illness, or having the illness had a larger impact on the participant's current relationship.

Lastly, four quantitative items and one qualitative item were added to evaluate how the COVID-19 pandemic and related measures impacted IPV. Items included physical abuse perpetration and victimization, called *COVID-19 Physical IPV Change,* and psychological abuse perpetration and victimization, called *COVID-19 Psychological IPV Change*. Participants rated these four items on a three-point scale: decreased (1), stayed the same (2), to increased (3). A total score for physical violence was calculated by using the mean of the physical violence

perpetration item and physical violence victimization item. Similarly, a total score for psychological violence was calculated by using the mean of the psychological violence perpetration item and psychological violence victimization item. Thus, a score of 2 indicated that there was no change in IPV after the onset of COVID-19 and related measures. A score above 2 indicated that IPV had increased after the onset of the pandemic and a score below 2 indicated that IPV had decreased after the onset of the pandemic. Participants were also asked to describe in their own words how they believe COVID-19 and its related measures have had an impact on physical and psychological IPV in their current relationship. These responses will be used within the discussion section to aid to the interpretation of the quantitative scores representing change in IPV after the COVID-19 pandemic.

# Results

Analyses were conducted as follows: first, missing data procedures are presented for each measure in the study. Then, prevalence rates are presented for IPV perpetration and victimization and for heterosexist and discriminatory experiences. Next, demographic variables, such as gender identity, ethnicity, and sexual orientation, were examined to determine if they were significantly associated with internalized homophobia, discriminatory experiences, attachment strategies, and/or intimate partner violence perpetration and victimization. Additionally, continuous measures (internalized homophobia, experiences of discrimination, attachment, and intimate partner violence) were examined to determine whether significant correlations between measures exist. For the main analyses, goal one was tested by performing multiple regressions to establish whether internalized homophobia and daily heterosexist experiences independently predict intimate partner psychological violence and intimate partner physical violence, while controlling for demographic covariates. Goal two was examined by performing multiple regressions to establish whether internalized homophobia and daily heterosexist experiences independently predicted avoidant and anxious attachment strategies, while also controlling for demographic variables. To examine goal three, multiple regressions were performed to determine if attachment strategies independently predict physical and psychological IPV while controlling for related demographic variables. Although problems with hierarchical regression have been well documented in the literature, the current study's strong theoretical basis for entering the current variables in their specific order ideally justifies the use of this methodology (Cohen & Cohen, 1983; Petrocelli, 2003). Specifically, problems regarding the order in which variables are entered into the model have been found to significantly influence the results (Cohen & Cohen, 1983). In the current study, demographic variables were entered in step one of the

regression analysis and the predictor variable of interest was entered in step two of the analysis. Variables entered into the analysis later, as independent variables, should not be a cause of a variable entered earlier (Cohen & Cohen, 1983). In the current study, it is extremely unlikely that internalized homophobia, heterosexist experiences, or attachment strategies were the cause of any related demographic variables (e.g., age, gender identity, sexual orientation, ethnicity). Lastly, goal four was tested by conducting the mediational analysis outlined by Hayes (2013) which uses OLS regression to determine how an antecedent (e.g., predictor) variable is associated with a consequent (i.e., outcome) variable through a mediating or intervening variable. In goal four, I sought to determine whether attachment could account for any established relationship between internalized homophobia and/or daily experiences of discrimination and IPV. A power analysis was conducted and showed that, even for our most complex analyses, a sample size of 64 participants could still detect a medium effect size ($f^2 = .46$) at a $p$ value of .01.

Due to the onset of the global COVID-19 pandemic, additional analyses were conducted to address the hypotheses created to explore how psychological symptoms and stress related to the pandemic may impact existing variables. Correlations were run to determine whether a change in psychological symptoms after pandemic onset is associated with a change in IPV following the onset of the pandemic. Similarly, I conducted a correlation to determine if changes in overall stress levels (e.g., stress related to work, parenting, relationships, family, caring for sick loved ones, etc.) was related to a change in IPV in the relationship since the onset of the pandemic. Lastly, a correlation was also conducted to evaluate whether one's attachment strategies were associated with increasing feelings of closeness after the pandemic and related restrictions began.

**Missing Data Procedures**

The following variables were evaluated for missing data through SPSS 27: internalized homophobia, daily heterosexist experiences, ECR anxious attachment, ECR avoidant attachment, physical IPV victimization, physical IPV perpetration, psychological IPV victimization, psychological IPV perpetration, LGBTQ+ specific IPV items, and coercive control victimization. All variables of interest had less than 3% missing data, with the exception of participants who were excluded from analysis due to erroneous or random responding or participants who did not meet the inclusion criteria. Of the 102 participants who began the study, 38 participants were excluded from the data analysis resulting in a final sample size of 64 participants. Twenty-six participants were excluded from the data analysis for blatantly erroneous data or random responding. For example, entering all ones as responses, answering the open-ended question nonsensically (e.g., responding to a question about the impact of COVID-19 on IPV with "kept a safe distance from the people around me"), and providing an email address for the prize draw that was a series of numbers and letters. Most of the 26 participant's data consisted of all of the above. Nine participants were removed as they stopped responding after the demographic questionnaire. Two participants were removed because they reported they did not live in Canada or the US, which was an inclusion criterion for the study. One participant was excluded as they indicated that both their sexual orientation is heterosexual and they referred to their husband in the open-ended questions, so it was suspected the participant did not read that the inclusion criteria was for women currently in a same-gender relationship.

**Minority stress measures.** Of the 64 participants who were included in the analysis, there was no missing data on the short form Lesbian Internalized Homophobia Scale (S-LIHS). For the Daily Experiences of Heterosexism Questionnaire (DHEQ) two participants answered zero items. Two participants had missing data for one item each ("being sexually harassed

because you are LGBTQ+" and "hearing about LGBTQ+ people you know being treated unfairly"). These items were left blank and the total was calculated based on existing data in an attempt to authentically reflect the participant's experiences. Thus, in the raw data these items were coded as missing (999) but were calculated into totals as a zero so as not to overestimate the discriminatory experiences of participants. However, a zero was not inputted in the raw data as it may not account for an experience that occurred, but the participant was hesitant to report. Thus, total scores for heterosexist experiences were calculated based on whatever data was provided by each participant, unless they did not answer full scales. Due to this, total scores were calculated for 96.9% (N = 62) of the sample.

**Attachment measures.** For the Experiences in Close Relationships Revised Scale (ECR-R), six participants had missing data, such that at least one question was left incomplete (9.4%). Three of these participants did not respond to any items (4.7%) and therefore totals were not computed. The other three participants each had only one question left incomplete.

Little's Missing Completely at Random (MCAR) test was non-significant, $\chi 2 = 67.07$, df $= 69$, $p = 0.54$. Therefore, an expectation maximum (EM) procedure to find the maximum likelihood estimates was used to calculate missing data for participants who completed at least half of the questionnaire.

**Partner violence measures.** Three participants left 100% of the items on both the Revised Conflict Tactics Scale (CTS-2) and the Coercive Control Scale (CCS) blank, thus total scores for these participants were not calculated. Additionally, one participant completed the CTS-2 but did not complete the CCS, thus totals were not calculated for the CCS. One participant left one item ("My partner burned or scalded me on purpose") on the CTS-2 blank. Totals were calculated based on existing data in an attempt to authentically reflect this

participant's experience. Thus, this item was coded as missing (999) but the total score was calculated as if this item was not endorsed (e.g., a zero). The item was left coded as a 999 so the raw data would reflect that the participant may have been hesitant to report the abusive experience occurred but scored as a zero so that the abusive experiences of this participant were not overestimated. Thus, total scores for abusive experiences were calculated based on whatever data was provided, unless they did not answer the full scale (N = 4). Approximately 94% (N = 60) of participants completed every item on the CTS and the CCS.

**COVID-19 items.** For the COVID-19 psychological symptoms items, four participants (6.25%) left all items blank, thus totals were not calculated for these four participants.

For the COVID-19 relationship stress items, the same four participants did not respond to any items and one additional participant stopped responding, thus total scores were not calculated for these five participants. One participant only completed one of six items; thus, a total score was also not calculated for this participant. One participant answered four of six items. For this participant an average score was calculated using the four items they did respond to. Therefore, a total score was calculated for 58 participants (90.6% of the sample) for the COVID-19 relationship stress scale.

For the COVID-19 illness stress items, the same five participants did not respond to any of the three items; thus, totals were not calculated for five participants (7.8% of the sample).

For the IPV perpetration and victimization items, 16 participants (25% of the sample) did not respond to any of the four items. Five of these 16 participants had already stopped responding to the questionnaire before these items. However, it is expected the other eleven respondents did not respond to the items asking about a change in physical and verbal abuse in their romantic relationship due to COVID-19 because they did not report any pre-existing

violence in the relationship. Several of these participants indicated this in the qualitative question that followed (e.g., "None of those things happened, before or during, so for me personally, COVID-19 has had no impact in that regard" and "my partner never did those things to me before or after the pandemic nor did I do those things to her."). Participants who reported qualitatively that there had been no change in IPV given they did not experience IPV prior to COVID-19, a score of 2 was inputted to represent their response of no change. After scores were inputted based on qualitative responses, a total score was calculated for 58 participants (90.6% of the sample) for the psychological and physical IPV change items.

**Means and Frequencies**

Frequencies for demographic variables (ethnicity, language, annual income, etc.) are reported in Table 1. Mean scores and standard deviations were calculated for all continuous variables of interest (e.g., internalized homophobia, daily heterosexist experiences, attachment, and partner violence) for the entire sample (see Table 2).

Table 1

*Selected Demographic Characteristics*

| Variable | *N* | *n* | % |
|---|---|---|---|
| Ethnicity | 64 | | |
| Asian | | 5 | 7.8 |
| Black or African Canadian/American | | 3 | 4.7 |
| Caucasian or European | | 50 | 78.1 |
| Indigenous, First Nations, Inuit, or Metis | | 2 | 3.1 |
| Latinx or Hispanic | | 3 | 4.7 |
| Mixed | | 1 | 1.6 |
| Country of Birth | 64 | | |
| Canada | | 38 | 59.4 |
| United States | | 17 | 26.6 |
| Other | | 6 | 9.4 |
| No answer | | 3 | 4.7 |
| Current Country of Residence | 64 | | |
| Canada | | 43 | 67.2 |
| United States | | 21 | 32.8 |
| Primary Language | 64 | | |
| English | | 60 | 93.8 |
| French | | 2 | 3.1 |
| Spanish | | 1 | 1.6 |
| Other | | 1 | 1.6 |

| Variable | *N* | *n* | % |
|---|---|---|---|
| Annual Household Income | 64 | | |
| Less than $10,000 | | 1 | 1.6 |
| $10,000 - $24,999 | | 6 | 9.4 |
| $25,000 - $49,999 | | 21 | 32.8 |
| $50,000 - $74,999 | | 14 | 21.9 |
| $75,000 - $99,999 | | 6 | 9.4 |
| $100,000 - $149,999 | | 9 | 14.1 |
| $150,000 or more | | 2 | 3.1 |
| Prefer not to say | | 5 | 7.8 |
| Sexual Orientation | 64 | | |
| Heterosexual | | 1 | 1.6 |
| Bisexual | | 17 | 26.6 |
| Lesbian or Gay | | 29 | 45.3 |
| Pansexual | | 3 | 4.7 |
| Queer | | 14 | 21.9 |
| Current Relationship Status | 64 | | |
| In a monogamous relationship | | 60 | 93.8 |
| In an open relationship | | 4 | 6.3 |
| Gender Identity | 64 | | |
| Cisgender | | 61 | 95.3 |
| Non-binary or Genderfluid | | 2 | 3.2 |
| Two-Spirit | | 1 | 1.6 |

| Variable | *N* | *n* | % |
|---|---|---|---|
| Education | 64 | | |
| High school diploma or equivalent | | 9 | 14.1 |
| Trades certificate or diploma | | 4 | 6.3 |
| College diploma or University certificate | | 5 | 7.8 |
| Bachelor’s degree | | 26 | 40.6 |
| University certificate above bachelor level | | 1 | 1.6 |
| Advanced degree (e.g., masters, doctoral) | | 16 | 25.0 |
| Advanced professional degree/designation (e.g., medical, legal, dental degree) | | 3 | 4.7 |

*Note.* Education = highest level of education attained by participant.

Table 2

*Descriptive Statistics*

| Variable | *n* | *M* | *SD* | Range |
|---|---|---|---|---|
| Internalized Homophobia | 64 | 84.50 | 27.89 | 47-177 |
| Daily Heterosexist Experiences | 62 | 53.52 | 27.37 | 20-149 |
| Anxious Attachment | 61 | 3.21 | 1.37 | 1.1-6.1 |
| Avoidant Attachment | 61 | 2.40 | 1.21 | 1.0-5.2 |
| Physical IPV Perpetration | 60 | 1.03 | 3.02 | 0-16 |
| Physical IPV Victimization | 60 | 1.55 | 4.81 | 0-27 |
| Psychological IPV Perpetration | 60 | 10.75 | 15.58 | 0-75 |
| Psychological IPV Victimization | 60 | 10.20 | 16.31 | 0-81 |
| LGBTQ+ IPV Perpetration | 60 | 0.33 | 0.85 | 0-4 |
| LGBTQ+ IPV Victimization | 60 | 0.80 | 3.63 | 0-27 |
| Coercive Control Victimization | 60 | 6.30 | 18.54 | 0-108 |
| COVID-19 Psychological Symptoms | 60 | 2.54 | 0.52 | 1-3 |
| COVID-19 Relationship Stress | 58 | 2.20 | 0.44 | 1-3 |
| COVID-19 Illness Stress | 59 | 1.66 | 0.74 | 1-5 |
| COVID-19 Physical IPV Change | 58 | 1.88 | 0.34 | 1-3 |
| COVID-19 Psychological IPV Change | 58 | 2.03 | 0.55 | 1-3 |

**Intimate Partner Violence Prevalence Rates**

**Physical violence.** In the current sample, about a fifth of participants endorsed at least one of the physical violence perpetration items. That is, 17.2% indicated that they hit, kicked, slapped, grabbed, pushed, choked, burned, beat up, used a knife or gun on, or threw something at their partner within the past year ($n$ = 11). Similarly, 18.8% of the participants in the current sample endorsed at least one of the past year physical violence victimization items ($n$ = 12). As expected, given that physical IPV perpetration and physical IPV victimization were correlated ($r$ = .85, $p < .001$), the participants reporting physical IPV perpetration ($n$ = 11) were often the same participants endorsing physical IPV victimization ($n$ = 12). For example, nine participants endorsed both physical IPV perpetration and victimization.

With regard to the most severe physical IPV items, one participant (1.6%) indicated that they had used a knife or gun on their partner and that their partner did this to them within the last year. Two participants (3.1%) indicated that they had both punched or hit by their partner and their partner did this to them once or twice within the past year. Additionally, one participant indicated they had perpetrated but not been a victim of punching or hitting by their partner within the past year (1.6%), and another participant indicated that they had been a victim of but had not perpetrated punching or hitting their partner (1.6%). Three participants (4.7%) indicated they had choked or been choked by their partner in the previous year, with one participant endorsing only perpetration of this item and two participants endorsing only victimization. Two participants (3.1%) indicated they had both beat up and been beaten up by their partner 3-5 times in the past year.

**Psychological violence.** As expected, psychological violence was more widely endorsed by the LBGTQ+ women in the sample than physical violence. In the current sample, 61% of participants endorsed at least one of the psychological violence perpetration items. That is, 39

participants reported insulting, shouting, spiting, or threatening their partner within the past year. Similarly, 59.4% of participants endorsed at least one of the psychological violence victimization items within the past year ($n$ = 38). Similar to physical violence, psychological IPV perpetration and victimization were significantly positively correlated ($r$ = .88, $p$ < .001), thus oftentimes the participants reporting psychological IPV perpetration were also the participants reporting psychological IPV victimization.

The most endorsed item was “shouted or yelled at my partner” ($n$ = 37 for perpetration and $n$ = 33 for victimization) followed by “insulted or swore at my partner” ($n$ = 33 for perpetration and $n$ = 31 for victimization) and “stomped out of the room during a disagreement with my partner” ($n$ = 32 for perpetration and $n$ = 27 for victimization). The least frequently endorsed items ($n$ = 3 for perpetration and victimization) were “I called my partner fat or ugly” and ‘My partner called me fat or ugly.”

**LGBTQ+ specific violence.** In the current sample, 18% ($n$ = 11) of participants endorsed at least one of the LGBTQ+ specific violence perpetration items within the past year. That is, 11 participants reported threatening to ‘out’ their partner, forcing their partner to show affection in public, using their partner’s age, race, class, or religion against her, questioning whether their partner is a ‘real’ LGBTQ+ woman, or telling their partner she deserves what she gets because she is LGBTQ+ within the past year. Similarly, 16% ($n$ = 10) of participants endorsed at least one of the LGBTQ+ specific violence victimization items within the past year.

The most endorsed items were “My partner questioned whether I was a ‘real’ lesbian, gay, bisexual, or queer woman,” and “I used my partner’s age, race, class, or religion against her,” with five participants endorsing each item.

**Coercive control.** In the current sample, 37% (*n* = 22) of participants endorsed at least one coercive control victimization item. The most commonly endorsed item (*n* = 13) was "My partner threatened to leave the relationship," followed by (*n* = 11) "My partner blamed me when upset even if I had nothing to do with it." The least commonly endorsed items (*n* = 1) were "My partner did not want me to go to school or to other self-improvement activities," "My partner tried to convince my family and friend that I was crazy," "My partner tried to keep me from seeing or talking to my family," and "My partner tried to turn my family and friends against me."

**Previous Year IPV.** Twelve participants (20%) reported experiencing physical IPV and sixteen participants (26%) reported psychological IPV which occurred more than a year ago. Similarly, 13 participants (22%) endorsed at least one coercive control item and 13 participants (22%) indicated they experienced LGBTQ+ specific violence prior to the past year.

**Heterosexist Experiences Prevalence Rates**

In the current sample, 100% of participants endorsed at least one item on the DHEQ which occurred in the past year. Items included a range of homophobic, heterosexist, and/or microaggression experiences such as being called offensive names, being rejected by family members, feeling on guard or having to hide one's identity as an LGBTQ+ woman, and being harassed or treated unfairly because of one's identity as an LGBTQ+ woman in stores or restaurants that occurred within the past year. The participant who endorsed the fewest heterosexist experiences still endorsed experiencing six heterosexist events within the past year.

**Gender identity items.** In the current sample, 53% (*n* = 33) of participants endorsed at least one heterosexist experience related to their gender identity within the past year. The most frequently endorsed item (*n* = 22; 35%) was, "Difficulty finding clothes that you are comfortable wearing because of your gender expression," followed by (*n* =18; 29%) "Being misunderstood by people because of your gender expression." The least frequently endorsed item (*n* = 6; 10%)

was, "Being harassed in bathrooms because of your gender expression." However, of the six participants who reported this happened to them, two participants indicated the experience bothered them "extremely."

**Vigilance items.** In the current sample, 84% (*n* = 52) of participants endorsed at least one heterosexist experience related to vigilance in the past year. The most frequently endorsed item (*n* = 49; 79%) was, "Watching what you say and do around heterosexual people." The second most endorsed item (*n* = 35; 56%) was, "Hiding part of your life from other people." The item, "Pretending that you have an opposite sex partner" was the least frequently endorsed item with 18% (*n* = 11) of the sample endorsing this. Two participants indicated this bothered them extremely.

**Parenting items.** In the current sample, 18 % (*n* = 11) of the participants endorsed at least one heterosexist experience related to parenting in the past year. As many participants may not have children, this percentage is likely a gross underestimate of the percentage of LGBTQ+ mothers who experience heterosexism related to parenting. However, given the current study did not ask participants to report whether they had children or not, it was not possible to determine the percentage of participants with children who were endorsing each item. The most frequently endorsed item (*n* = 7; 11%) was, "People assuming you are heterosexual because you have children," followed by (*n* = 6; 10%), "Difficulty finding other LGBTQ+ families for you and your children to socialize with." Two participants (3%) endorsed "your children being rejected by other children because you are LGBTQ+," and "Your children being verbally harassed because you are LGBTQ+."

**Discrimination items.** In the current sample, 94% (*n* = 58) of participants endorsed experiencing discrimination related to their sexual orientation in the past year. The most

frequently endorsed item (*n* = 54; 87%) was "People staring at you when you are out in public because you are LGBTQ+" followed by (*n* = 24; 39%) "Being called names such as 'fag' or 'dyke'." Approximately 20% (*n* = 12; 19%) of participants endorsed the items "Being verbally harassed by people you know because you are LGBTQ+" and "Being treated unfairly in stores or restaurants because you are LGBTQ+."

**Vicarious trauma items.** In the current sample, 98% (*n* = 61) of participants endorsed at least one heterosexist experience related to vicarious trauma in the past year. Only one participant reported never having heard about hate crimes that happened to LGBTQ+ people they didn't know. Of the 61 participants (98% of the current sample) who reported they had experienced this, 44 participants (72%) indicated it bothered them "extremely." The other most frequently endorsed item (*n* = 60) was "Hearing about other LGBTQ+ people you don't know being treated unfairly." The least frequently endorsed item was "Hearing other people being called names such as 'fag' or 'dyke.' However, 71% (*n* = 44) of the sample still endorsed this experience.

**Family of origin items.** In the current sample, 69% (*n* = 43) of participants endorsed at least one heterosexist experience related to their family of origin in the past year. The most frequently endorsed item (*n* = 34 or 55%) was "your family avoiding talking about your LGBTQ+ identity." The least frequently endorsed item (*n* = 5 or 8%) was "being rejected by a sibling or siblings because you are LGBTQ+."

**Victimization items.** In the current sample, 15% (*n* = 9) of participants endorsed experiencing some form of victimization related to their LGBTQ+ identity in the past year. The most frequently endorsed item (*n* = 9 or 15%) was "being sexually harassed because you are LGBTQ+." This bothered all participants who endorsed it "extremely." Five participants (8% of

the current sample) reported more than one of the victimization items. Three participants (5%) endorsed being physically assaulted (punched, hit, kicked, or beaten) because they are LGBTQ+. One participant (2%) reported being assaulted by a weapon because they are LGBTQ+. Four participants (7%) reported being sexually assaulted or raped because they are LGBTQ+ and four participants (7%) also reported having objects thrown at them because they are LGBTQ+.

**Isolation items.** In the current sample, 86% ($n$ = 53) of participants endorsed at least one experience of isolation related to their sexual orientation in the past year. The most frequently endorsed item ($n$ = 45) was "difficulty finding LGBTQ+ friends." The least frequently endorsed item ($n$ = 20) was "difficulty finding a partner because you are LGBTQ+."

**Levels of Internalized Homophobia**

The current study's average total score of 84.50 (SD = 27.89) was similar to Piggott's (2004) reported average total score on the S-LIHS of 88.89 (SD = 32.92). Average scores for individual subscales ranged from 1.33 (feelings about being LGBTQ+) to 3.75 (attitudes toward other LGBTQ+ women), which is relatively low on a six-point likert scale, but consistent with research findings that it can be difficult to detect high levels of internalized homophobia in individuals who must be 'out' to participate in the research (Carvalho, Lewis, Derlega, Winstead, & Viggiano, 2011).

**Levels of Attachment Avoidance and Anxiety**

The mean for attachment anxiety in this sample of LGBTQ+ women currently in a relationship was 3.21 and the mean for attachment avoidance was 2.40. Given scores below four represent disagreeing with the item, so on average, the LGBTQ+ women in this sample were relatively securely attached. Fraley (2012) reported that within an online sample of 17,000 people (sexual orientation was not recorded), the women (who were both married and unmarried;

73% of sample) had an average score of 3.56 for attachment anxiety and 2.92 for attachment avoidance. Thus, average scores on both attachment anxiety and avoidance were somewhat lower in the current sample of LGBTQ+ women compared to Fraley's sample which likely mainly consisted of heterosexual participants. However, a recent study of 196 women who identify as Lesbians in Chile reported a mean of 3.52 for attachment anxiety and 2.33 for attachment avoidance, which is closer to the average scores found in the current study (Guzmán-González et al., 2020). Relationship status was not reported in the Chilean study, so it is unclear whether these women were or were not in a relationship at the time of data collection.

## Correlations among Demographic Variables and Association between Demographic Variables, IPV, Attachment, and Minority Stress

Demographic variables were analyzed for group differences to determine if any variables should be controlled for during the next steps of the analyses. Specifically, gender identity, age, identity as a member of a visible minority group, country of origin, socioeconomic status, and sexual orientation were examined to determine if they were linked to IPV, LGBTQ+ minority stress, or associated with avoidant or anxious attachment. Correlations between continue demographic variables, IPV, minority stress, and attachment were calculated; the relationships with categorical demographic variables were analyzed using either independent samples t-tests or one-way ANOVAs. Typically, groups were collapsed into broader categories when the sample size was too small (e.g., all individuals who reported they were not cisgender were collapsed into one group). To correct for the high number of analyses conducted, a $p$ value of less than .01 was used. When significant group differences were found, these variables were added as covariates into each subsequent model to control for their effects on IPV (CTS2 total score and CCS total score), minority stress, and/or attachment.

**Gender identity.** As there were only three participants that identified as non-cisgender (e.g., non-binary, genderfluid, or two-spirit), an independent samples t-test could not be meaningfully interpreted. However, of the 61 participants who identified as cisgender, the mean score for total internalized homophobia, total heterosexist experiences, anxious attachment, avoidant attachment, psychological perpetration and victimization violence, and coercive control were all lower than the mean score on those measures for the three participants who identified as non-binary, genderfluid, or two-spirit. For example, the mean score on the DHEQ was 52.05 for cisgender women yet was 82.33 for non-cisgender participants; however, this was not a significant difference due to the very low sample size.

**Age.** Age was not significantly correlated with internalized homophobia ($r$ = -.17, $p$ =.18), daily heterosexist experiences ($r$ = -.10, $p$ = .44), anxious attachment ($r$ = -.06, $p$ = .63), avoidant attachment ($r$ = .08, $p$ = .55), psychological IPV perpetration ($r$ = .09, $p$ = .51), psychological IPV victimization ($r$ = .01, $p$ = .92), coercive control victimization ($r$ = .12, $p$ = .37), physical IPV perpetration ($r$ = .08, $p$ = .52), or physical IPV victimization ($r$ = .02, $p$ = .90).

**Identity as a visible minority.** Due to the small sample size, differences based on specific ethnicity and racial identification groups were not examined. However, differences in key variables based on overall identification as a visible minority were calculated. Thirteen participants reported they identify as a visible minority; participants identifying as a visible minority were coded as 1 and participants not identifying as a visible minority were coded as 2. Of these 13 participants, 12 identified as a race other than Caucasian. One participant self-reported identifying as Caucasian or European, but still identified as a visible minority. Upon examining this participants data, they wrote about being a person with a disability which may be

why they identify as a visible minority. As I don't believe the person erroneously endorsed identity as a visible minority, they were left in this group for the analysis.

Significant differences in reported internalized homophobia were found based on identification as a visible minority, ($t$ (61) = 3.47, $p$ = .001). Participants who identified as a visible minority reported ($n$ = 13) more internalized homophobia ($M$ = 106.23, $SD$ = 33.64) than participants who did not identify as a visible minority ($M$ = 78.38, $SD$ = 23.42).

Significant differences in reported daily experiences of heterosexism were not found based on identification as a visible minority, ($t$ (59) = 1.29, $p$ = .20).

Significant differences in anxious attachment were not found based on identification as a visible minority, ($t$ (58) = 2.38, $p$ = .02). Although not statistically significant, participants who identified as a visible minority ($n$ = 13) had higher scores on anxious attachment ($M$ = 3.98, $SD$ = 1.44) than participants who did not identify as a visible minority ($M$ = 2.99, $SD$ = 1.29).

Significant differences in avoidant attachment were found based on identification as a visible minority, ($t$ (58) = 2.52, $p$ = .01). Participants who identified as a visible minority (N = 13) had higher scores on avoidant attachment ($M$ = 3.13, $SD$ = 0.91) than participants who did not identify as a visible minority ($M$ = 2.20, $SD$ = 1.23).

Significant differences in reported physical IPV perpetration were found based on identification as a visible minority, ($t$ (58) = 2.26, $p$ = .002). LGBTQ+ women who identified as a member of a visible minority group ($n$ = 13) reported higher levels of physical IPV perpetration ($M$ = 3.31, $SD$ = 5.39) than women who identified as Caucasian ($M$ = 0.43, $SD$ = 1.57). Significant differences in reported physical IPV victimization were not found based on identification as a visible minority, ($t$ (58) = 2.46, $p$ = .02).

Significant differences in reported psychological IPV perpetration were found based on identification as a visible minority, ($t$ (58) = 2.72, $p$ = .009). LGBTQ+ women who identified as a member of a visible minority group ($n$ = 13) reported higher levels of psychological IPV perpetration ($M$ = 20.46, $SD$ = 12.02) than women who identified as Caucasian ($M$ = 7.81, $SD$ = 12.02). Significant differences in reported psychological IPV victimization were also found based on identification as a visible minority, ($t$ (58) = 2.57, $p$ = .01). LGBTQ+ women who identified as a member of a visible minority group ($n$ = 13) reported higher levels of psychological IPV victimization ($M$ = 19.46, $SD$ = 23.86) than women who identified as Caucasian ($M$ = 7.10, $SD$ = 12.23).

No significant differences in reported coercive control victimization were found based on identification as a visible minority, ($t$ (57) = 0.42, $p$ = .68).

**Country of origin.** Country of origin was divided into three groups: those born in Canada, those born in the United States, and those born elsewhere. Country of origin was not found to be significantly associated with internalized homophobia, $F$ = 2.92, $p$ = .06, daily experiences of heterosexism, $F$ = 0.05, $p$ = .95, anxious attachment, $F$ = 2.84, $p$ = .07, avoidant attachment, $F$ = 1.74, $p$ = .18, physical IPV perpetration, $F$ = 3.12, $p$ = .05, physical IPV victimization, $F$ = 3.40, $p$ = .04, psychological IPV perpetration, $F$ = 0.31, $p$ = .74, psychological IPV victimization, $F$ = 0.59, $p$ = .56, or coercive control victimization, $F$ = 0.20, $p$ = .82

**Socioeconomic status.** Personal income was used as an estimate of socioeconomic status (SES). Personal income was not significantly correlated with internalized homophobia ($r$ = .06, $p$ =.64), daily experiences of heterosexism ($r$ = -.20, $p$ =.12), anxious attachment ($r$ = -.06, $p$ =.67), avoidant attachment ($r$ = .09, $p$ =.48), or physical IPV perpetration ($r$ = .07, $p$ =.59) physical IPV

victimization ($r$ = .08, $p$ =.55), psychological IPV perpetration ($r$ = -.02, $p$ =.86), psychological IPV victimization ($r$ = -.06, $p$ =.66), or coercive control victimization ($r$ = -.12, $p$ =.35).

**Sexual orientation.** Due to a small sample size and previous research finding differences in IPV prevalence for bisexual women compared to other LGBTQ+ women, sexual orientation was divided into two groups for analysis. One group was women who self-identified as bisexual and the other group was women who identified as lesbian, gay, pansexual, or queer. Although a pansexual identity and a bisexual identity are conceptually alike (e.g., individuals who identify as pansexual are attracted to others regardless of gender identity and individuals who identify as bisexual are attracted to more than one gender), the decision was made to only analyze bisexual women as a separate group given that previous research identified this sexual orientation in particular as facing unique challenges. However, given previous research did not offer pansexual, queer, or other sexual orientations as options, it is possible that these participants would have been captured by a category such as bisexual in those studies. Given only three participants identified as pansexual in the current sample, the results did not differ when pansexual participants were grouped in with bisexual participants. Future research is essential to examine similarities and differences amongst different LGBTQ+ identities.

In the current sample, bisexual women ($n$ =17) reported more internalized homophobia ($M$ = 95.4, $SD$ = 22.2) than other LGBTQ+ women ($M$ = *79.0*, $SD$ = 27.1), but this difference was not statistically significant, $t(61)$ = 2.46, $p$ = .02. No significant differences in reported daily heterosexist experiences were found, $t(59)$ = -2.07, $p$ = .04. No significant sexual orientation differences in anxious attachment, $t(58)$ = -0.64, $p$ = .53, or avoidant attachment, $t(58)$ = -0.94, $p$ = .35, were found. Significant sexual orientation differences were found for physical IPV perpetration, $t(58)$ = -2.65, $p$ = .02, psychological IPV perpetration $t(58)$ = -3.13, $p$ = .003, and

psychological IPV victimization, $t(58) = -3.28$, $p = .002$. Bisexual women endorsed experiencing significantly less physical IPV perpetration ($M = 0.00$, $SD = .000$) compared to other LGBTQ+ women ($M = 1.04$, $SD = 2.65$, significantly less psychological IPV perpetration ($M = 3.53$, $SD = 6.02$) compared to other LGBTQ+ women ($M = 12.89$, $SD = 17.14$), and significantly less psychological IPV victimization ($M = 2.60$, $SD = 5.11$) compared to other LGBTQ+ women ($M = 12.42$, $SD = 18.03$).

**Summary.** Several demographic variables were found to be significantly associated with internalized homophobia, experiences of heterosexism, anxious attachment, avoidant attachment, physical IPV perpetration and victimization, and psychological IPV perpetration and victimization. When examining differences in variables of interest for different sexual orientation and visible minority identities, five t-tests were run. Using an alpha level of $p < .01$, identity as a visible minority and sexual orientation were the only demographic variables associated with continuous variables of interest. However, sexual orientation was not included as a control variable given the low sample size in different sexual orientation identities and because the grouping of sexual orientation identity into non-bisexual and bisexual is not necessarily an accurate or meaningful distinction to account for within the main analyses, given the purposes of the study. Participants who identify as a visible minority reported significantly greater internalized homophobia, greater avoidant attachment strategies, greater physical IPV perpetration, greater psychological IPV perpetration, and greater psychological IPV victimization. Therefore, visible minority status will be accounted for within the main analyses.

## Associations among Continuous Measures

Correlations among key variables (internalized homophobia, daily heterosexist experiences, attachment, and IPV) are presented in Table 3, 4, and 5. Again, significant

correlations were defined at $a = .01$ to account for multiple comparisons; these significant correlations are discussed below.

**Internalized homophobia.** Significant positive correlations between internalized homophobia and anxious attachment were not found after the Bonferroni correction was applied. However, there was a positive correlation with a large effect size between internalized homophobia and avoidant attachment. Thus, endorsing items representing one's internalization of society's homophobia was significantly associated with reporting attachment avoidant strategies. A small but non-significant positive correlation was found between internalized homophobia and physical IPV perpetration and victimization. No significant correlations between internalized homophobia and psychological IPV perpetration, psychological IPV victimization, or coercive control were found in the current study.

Table 3

*Pearson Correlations between Minority Stress, Attachment, and IPV*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1. Internalized Homophobia | | | | | | | | | |
| 2. Heterosexist Experiences | .18 | | | | | | | | |
| 3. Anxious Attachment | .28* | -.05 | | | | | | | |
| 4. Avoidant Attachment | .51** | .11 | .49** | | | | | | |
| 5. Physical IPV Perpetration | .22 | -.03 | .24 | .30* | | | | | |
| 6. Physical IPV Victimization | .17 | -.08 | .28* | .40** | .85** | | | | |
| 7. Psychological IPV Perpetration | .02 | .05 | .34** | .38** | .44** | .50** | | | |
| 8. Psychological IPV Victimization | .05 | .10 | .38** | .34** | .44** | .48** | .88** | | |
| 9. LGBTQ+ IPV Items | .43** | .08 | .04 | .30* | .29* | .17 | -.09 | -.08 | |
| 10. Coercive Control | -.04 | -.07 | .23 | .40** | .16 | .29* | .75** | .59** | -.08 |

*Note.** $p < .05$; ** $p<.01$

Table 4

*Pearson Correlations between S-LIHS Subscales, Attachment, and IPV*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Public Identity | | | | | | | |
| 2. Connection to Community - Interaction | .45** | | | | | | |
| 3. Connection to Community Knowledge | .43** | .52** | | | | | |
| 4. Feelings about being LGBTQ+ | .54** | .37** | .19 | | | | |
| 5. Attitudes toward other LGBTQ+ | .38** | .50** | .20 | .41** | | | |
| 6. Anxious Attachment | .20 | .28* | .19 | .11 | .28* | | |
| 7. Avoidant Attachment | .47** | .46** | .26* | .20 | .26* | .49** | |
| 8. IPV | .03 | .22 | .01 | .10 | .34** | .41** | .44** |

*Note.* IPV = Total score from Conflict Tactics Scale and Coercive Control Scale, * $p < .05$; ** $p<.01$

Table 5

*Pearson Correlations between DHEQ Subscales, Attachment, and IPV*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Gender Identity | | | | | | | | | | |
| 2. Vigilance | .32* | | | | | | | | | |
| 3. Parenting | .28* | .13 | | | | | | | | |
| 4. Discrimination | .55** | .48** | .33** | | | | | | | |
| 5. Vicarious Trauma | .08 | .15 | -.09 | .35** | | | | | | |
| 6. Family of Origin | .49** | .65** | .19 | .58** | .18 | | | | | |
| 7. Victimization | .45** | .40** | .35** | .58** | .09 | .62** | | | | |
| 8. Isolation | .08 | .46** | .01 | .18 | .10 | .28* | .11 | | | |
| 9. Anxious Attachment | .01 | -.01 | .12 | -.19 | -.20 | .01 | .04 | .02 | | |
| 10. Avoidant Attachment | .18 | .19 | .12 | .10 | -.39** | .15 | .18 | .08 | .49** | |
| 11. IPV | .10 | -.08 | .43** | .01 | -.20 | .15 | .10 | -.05 | .41** | .44** |

*Note.* IPV = Total Score from Conflict Tactics Scale and Coercive Control Scale, * $p < .05$; ** $p<.01$

However, a moderate positive correlation was found between internalized homophobia and the LGBTQ+ partner violence items, although this scale did not have acceptable reliability and will not be used in the main analyses. All subscales of the LIHS except “feelings about being LGBTQ+” were associated with avoidant attachment. The subscale “attitudes toward other LGBTQ+ women” was the only subscale significantly positively correlated with the total IPV score, however this subscale did not have good reliability.

**Daily heterosexist experiences.** No significant positive correlations were found between daily heterosexist experiences and either type of attachment or IPV therefore, correlations between the subscales of the DHEQ and these key variables were explored. Vicarious trauma was moderately negatively correlated with avoidant attachment. Thus, participants who endorsed experiencing and being more distressed by vicarious trauma reported less attachment avoidance. The parenting subscale was moderately positively correlated with IPV. Thus, participants who endorsed experiencing more LGBTQ+ related discrimination with regard to their experience as parents also endorsed a significantly higher rate of IPV (sum of physical, psychological, LGBTQ+ specific violence, and coercive control).

**Attachment.** As expected, anxious and avoidant attachment showed a moderate positive correlation with one another. Anxious attachment was small to moderately positively correlated with physical IPV perpetration and victimization, but these correlations were non-significant. Anxious attachment was moderately correlated with psychological IPV perpetration and victimization. Avoidant attachment was moderately correlated with physical IPV perpetration, but this correlation was not significant. Avoidant attachment was moderately correlated with physical IPV victimization and psychological IPV perpetration. Avoidant attachment was moderately correlated with psychological victimization, but this correlation was not significant.

Anxious attachment was not significantly correlated with LGBTQ+ IPV items. Anxious attachment had a small correlation with coercive control, but this was non-significant. However, avoidant attachment was moderately correlated with coercive control ($p$ = .002, see Table 3) and moderately but not significantly correlated with LGBTQ+ specific IPV ($p$ = .02, see Table 3).

**IPV.** As expected, physical IPV perpetration was strongly correlated with physical IPV victimization and psychological IPV perpetration was strongly correlated with psychological IPV victimization. Physical IPV was moderately correlated with psychological IPV. Both physical and psychological IPV were not significantly correlated with LGBTQ+ IPV items, although physical IPV perpetration had a moderate correlation with the LGBTQ+ specific items. Also as expected, psychological IPV had a moderate to strong correlation with coercive control, suggesting they can be conceptualized as two dimensions of psychological partner violence and therefore were combined into one variable.

## COVID-19 Variables

**Pandemic-related psychological symptoms.** The four items in this scale, measuring sadness, anxiety, loneliness, and loss/grief, used a scale ranging from one (decreased since the start of the pandemic) to three (increased since the start of the pandemic). These four items were developed specifically for the purposes of this study because the onset of the COVID-19 pandemic occurred the month before data collection was set to commence. The average score on the item "feeling anxious or nervous" was 2.75, indicating that on average participants were feeling more anxious or nervous since the onset of the pandemic. Of the 60 participants who responded to this question, most ($n$ = 48; 80%) indicated feelings of anxiety and nervousness increased since the start of the pandemic, while 9 (15%) indicated they had stayed the same, and 3 (5%) indicated these feelings decreased. Similarly, the average score for the item "feeling sad, down, uninterested in life, or depressed" was 2.58; again, most participants ($n$ = 41; 68%)

reported an increase in these depressive feelings, 13 (22%) reported these feelings stayed the same, and 6 (10%) reported a decrease. The average score for the item "feelings of loss or grief" was 2.43 with almost half of participants (*n* = 29; 48%) reporting an increase in feelings related to loss, 28 (47%) reporting no change, and 3 (5%) reporting a decrease in these feelings. Lastly, the average score for "feelings of loneliness" was 2.40, with more than half of participants (*n* = 32; 53%) reporting an increase in feelings of loneliness, 20 (33%) reporting no change and 8 (13%) reporting a decrease in feelings of loneliness. The overall average score for COVID-19 psychological symptoms, which included all four items, was 2.54, indicating that generally within this sample, participants experienced more negative emotions since the start of the COVID-19 pandemic (with data collected from May 2020 - July 2020).

**Pandemic-related relationship stress.** The six items included in this scale, which measured how pandemic-related stressors were impacting relationship stress, were also rated from one (decreased since the start of the pandemic) to three (increased since the start of the pandemic). In the current sample, the average score on the item "general conflict in your relationship" was 2.19, with about a third of participants who responded to this question (*n* = 20; 34%) indicating conflict had increased in their relationship since the start of the pandemic, 29 participants indicating it had stayed the same, and 9 participants indicating it had decreased. The average score on the item "stress or conflict over money, jobs, working from home" was 2.43, with more than half of participants (*n* = 32; 55%) indicating conflict related to money and work had increased in their relationship since the start of the pandemic, 19 participants indicating it had stayed the same, and 7 participants indicating it had decreased. The average score on the item "stress or conflict related to children in the home (e.g., caregiving, home schooling)" was 1.97, with only 3 out of the 58 participants indicating conflict related to children had increased in

their relationship since the start of the pandemic, 50 participants indicating it had stayed the same, and 5 participants indicating it had decreased. Many participants who reported conflict related to children stayed the same wrote a later note indicating that the question was not relevant as they do not have children. The average score on the item “overall stress levels (either yours or your partner’s) contributing to stress or conflict in your relationship” was 2.42, with more than half of participants ($n$ = 33; 58%) indicating conflict related to overall stress had increased in their relationship since the start of the pandemic, 15 participants indicating it had stayed the same, and 9 participants indicating it had decreased. The average score on the item “you or your partner’s overall emotional health contributing to stress or conflict in your relationship” was 2.16, with more than a third of participants ($n$ = 23; 40%) indicating conflict related to their own or their partner’s emotional health had increased in their relationship since the start of the pandemic, more than a third of participants ($n$ = 21; 36%) participants indicating it had stayed the same, and 14 participants (24%) indicating it had decreased. The average score on the item “you or your partner’s overall physical health contributing to stress or conflict in your relationship” was 2.02, with some participants ($n$ = 10; 18%) indicating conflict related to their or their partner’s physical health had increased in their relationship since the start of the pandemic, but most participants ($n$ = 38; 67%) indicating it had stayed the same, and 9 participants (16%) indicating it had decreased.

**Feelings of closeness to partner.** The item “feelings of closeness to your partner” was also rated on a scale from one (decreased since the start of the pandemic) to three (increased since the start of the pandemic) with an average score of 2.42. In the current sample, 35 participants (59%) reported feelings of closeness to their partner had increased since the start of the pandemic, 15 participants (25%) indicated it had stayed the same, and 10 participants (17%)

indicated it had decreased. Thus, overall, despite increased stress and decreased overall emotional health in the sample, approximately 60% of participants reported feeling closer to their partners compared to before the pandemic.

**COVID-19 illness stress.** The three items examining whether COVID-19 illness related stressors were impacting conflict and stress in participant's relationships were measured on a scale from one (no impact on my relationship) to five (big impact on my relationship). The item "you or your partner's fears or worries about becoming ill" had an average score of 2.17, with 21 participants (36%) indicating this had no impact on their relationship and three participants (5%). indicating it had a big impact on their relationship. The item "you or your partner caring for each other or family members who have or are suspected of having the COVID-19 virus" had an average score of 1.42, with 45 participants (78%) indicating this had no impact on their relationship and only one participant (2%) indicating it had a big impact. Lastly, the item "you or your partner having a suspected or confirmed case of the COVID-19 virus" had an average score of 1.39, with 45 participants (78%) indicating this had no impact on their relationship and only one participant (2%) indicating it had a big impact. Given data collection was during the first few months of the pandemic, this likely reflects an absence of infection and/or little access to testing for the virus at that time.

**COVID-19 IPV change.** The four items examining a change in physical and psychological IPV perpetration and victimization were rated on a scale from one (decreased since the start of the pandemic) to three (increased since the start of the pandemic). For most participants, both physical and psychological IPV frequency did not change since the start of the pandemic onset. There was a greater increase in psychological IPV than physical IPV since the onset of the pandemic and related restrictions. The average score for a change in physical

victimization and perpetration since the pandemic onset was 1.88, with only one of the 50 respondents (2%) reporting an increase in physical IPV victimization since the onset of the pandemic. Forty-two respondents (84%) indicated that physical IPV victimization had stayed the same since the onset of the pandemic and seven participants (14%) reported a decrease in physical IPV victimization since the pandemic onset. No participants reported an increase in physical IPV perpetration since the pandemic onset, 44 (88%) indicated no change, and six participants (12%) reported physical IPV perpetration had decreased since the onset of the pandemic.

The average score for a change in psychological victimization and perpetration since the pandemic onset was 2.03, suggesting that overall, there was no change in psychological IPV. No change in psychological victimization since the onset of the pandemic was reported by most participants (*n* = 36; 72%). However, seven participants (14%) reported an increase in psychological victimization since the start of the pandemic and seven participants (14%) reported a decrease in psychological victimization. No change in psychological IPV perpetration since pandemic onset was also reported by most participants (*n* = 33; 66%). Ten participants (20%) reported an increase in psychological IPV perpetration since the onset of the pandemic and seven participants (14%) reported a decrease in psychological perpetration since the onset of the pandemic.

Participants were also invited to share in their own words how the onset of the COVID-19 pandemic affected the physical and/or psychological violence in their relationship. Several themes emerged from their answers, including participants' using the qualitative section to communicate that violence has never been an issue in their relationship, that the pandemic has improved their relationship and increased their feelings of closeness to each other, that the

pandemic negatively impacted their relationship leading to increased IPV, or that the pandemic negatively impacted their or their partner's mental health without an impact on IPV. Most participants wrote about how IPV had never been a problem for them or how there had been no change in IPV since the pandemic onset, mirroring the quantitative data reported above.

For example, several participants wrote about how they had never been violent, and the pandemic did not change this. One participant shared, "we have always been normal people with normal behaviour, we have never been violent, that hasn't changed during the pandemic."

Other participants wrote about how the pandemic and related measures (e.g., physical distancing, stay-at-home orders, work from home, etc.) have led to improvement within their relationship. One participant shared "COVID-19 has improved our relationship in many ways. It's brought us closer, we fight less and we are kinder to each other." Another wrote, "the increased time at home with my partner has been really good for us and has only been healthy."

For some participants, the pandemic led to some deterioration in their relationship, which might have resulted in their report that psychological IPV had increased since the pandemic onset. For example, one participant wrote, "being forced to live and work at home together for several months, without being able to see friends or family, took a toll on our relationship. We argue more." Another participant wrote, "There has been more stress on my partner as she is an essential worker and had to work the whole pandemic with the public. Lack of support from her work around safety as well as me being around all the time and due to disability being unable to keep up with household duties as much."

Lastly, other participants reported feeling more stress and less emotionally healthy but did not report any change in IPV. One participant wrote, "it's made me more anxious, more

dependent on alcohol." Another wrote, "It's caused sadness and anxiety in both my partner and I."

**Associations among COVID-19 Variables and Variables of Interest**

Correlations among key variables (internalized homophobia, daily heterosexist experiences, attachment, and past year IPV) and COVID-19 variables (change in physical IPV since pandemic onset, change in psychological IPV since pandemic onset, COVID-19 illness stress, COVID-19 relationship stress and conflict, and COVID-19 psychological symptom change) are presented in Table 6. Pandemic related psychological symptoms, pandemic-related relationship stress, and stress related to the COVID-19 virus were not significantly associated with past year IPV, minority stress, or attachment. Thus, these pandemic-related variables were not controlled for in the main analyses. As expected, pandemic-related relationship stress and conflict was significantly associated with an increase in psychological IPV since the onset of the pandemic. However, pandemic-related relationship stress and conflict were not significantly related to past year IPV so this variable was not included as a covariate in the main analyses.

Table 6

*Pearson Correlations between COVID-19 Related Variables and Key Variables of Interest*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Physical IPV Change | | | | | | | | | | |
| 2. Psychological IPV Change | .56** | | | | | | | | | |
| 3. COVID-19 Illness Stress | -.31* | -.11 | | | | | | | | |
| 4. COVID-19 Psychological Symptoms | .18 | .18 | .22** | | | | | | | |
| 5. COVID-19 Relationship Stress/Conflict | .27 | .49** | .13 | .52** | | | | | | |
| 6. Feelings of Closeness to Partner | -.11 | -.20 | -.10 | -.19 | -.30* | | | | | |
| 7. Anxious Attachment | -.01 | .11 | .27* | .21 | .25 | -.19 | | | | |
| 8. Avoidant Attachment | -.04 | .09 | .22 | .14 | .08 | -.17 | .49** | | | |
| 9. Heterosexist Experiences | .03 | .17 | .13 | -.03 | .03 | -.20 | -.05 | .11 | | |
| 10. Internalized Homophobia | -.06 | .19 | .30* | .20 | .15 | -.29* | .28* | .51** | .18 | |
| 11. IPV | -.39** | -.08 | .06 | -.18 | .09 | -.24 | .41** | .44** | .03 | .13 |

*Note.* IPV = Total Score from Conflict Tactics Scale and Coercive Control Scale, * $p < .05$; ** $p<.01$

**Goal One: Minority Stress and IPV**

**Hypothesis one.** It was expected that physical IPV perpetration and psychological IPV perpetration would be positively associated with victimization. It was also expected that physical IPV, psychological IPV, and coercive control would be positively correlated with each other. I computed Pearson correlation coefficients among the five types of IPV (physical IPV victimization, physical IPV perpetration, psychological IPV victimization, psychological IPV perpetration, and coercive control). LGBTQ+ specific items were not included in the analyses given the unacceptable internal reliability for this added scale. As expected, physical IPV victimization and perpetration were significantly positively correlated, $r = .85$, $p < .001$. Similarly, psychological IPV victimization and perpetration were significantly positively correlated, $r = .44$, $p < .001$. Physical IPV perpetration was also significantly positively correlated with psychological perpetration, $r = .44$, $p < .001$ and psychological victimization. Physical IPV victimization was also significantly positively correlated with psychological IPV perpetration, $r = .50$, $p < .001$, and psychological IPV victimization, $r = .48$, $p < .001$. Lastly, coercive control victimization was significantly positively correlated with psychological IPV victimization, $r = .59$, $p < .001$, and psychological IPV perpetration, $r = .75$, $p < .001$. Coercive control had a small but non-significant correlation with physical IPV perpetration ($r = .16$, $p$ $=.22$) and a moderate but non-significant correlation with physical IPV victimization ($r = .29$, $p$ $=.02$).

Given the high correlation between perpetration and victimization, physical IPV will include both perpetration and victimization and psychological IPV will also include both perpetration and victimization. Similarly, given the moderate to high associations between

psychological IPV and coercive control, these variables will be summed to create one psychological IPV variable in the main analyses.

**Hypothesis two.** It was expected that internalized homophobia and experiences of heterosexism and discrimination would be significantly positively associated with greater physical IPV. I conducted a hierarchical multiple regression for two sets of predictors in order to determine whether internalized homophobia and heterosexist and discriminatory experiences independently predict physical IPV while accounting for the effects of a related demographic variable, identity as a visible minority. Step one indicated that identity as a visible minority accounted for a significant amount of the physical IPV variability, $R^2 = .126$, $F$ (1, 57) = 8.26, $p = .006$, indicating that participants who identified as a visible minority tended to have higher scores on physical IPV perpetration and victimization. The second step evaluated whether minority stress, as represented by internalized homophobia and experiences of heterosexism and discrimination, predicted physical IPV above and beyond the effects of this related demographic variable. Minority stress did not account for a significant proportion of the variance in physical IPV after controlling for the effects of identity as a visible minority, $R^2$ change = .023, $F$ (1, 56) = 0.755, $p = .48$ (see Table 7).

Table 7

*Hierarchical Multiple Regression Analysis for the Prediction of Physical IPV by Internalized Homophobia and Experiences of Heterosexism and Discrimination*

| Variable | *B* | *SE B* | β | $R^2(\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .126** |
| Identity as a visible minority | -6.50 | 2.26 | -0.36** | |
| Step 2 | | | | .150 (.023) |
| Identity as a visible minority | -6.49 | 2.56 | -0.36* | |
| Internalized homophobia | 0.018 | 0.04 | 0.06 | |
| Discrimination/Heterosexism | -0.04 | 0.04 | -0.15 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

**Hypothesis three.** It was expected that internalized homophobia and experiences of heterosexism and discrimination would be significantly positively associated with greater psychological IPV. I conducted a hierarchical linear regression for two sets of predictors in order to determine whether minority stress, specifically internalized homophobia and heterosexist and discriminatory experiences, independently predict psychological IPV while accounting for the effects of related demographic variables. Step one indicated that identity as a visible minority, accounted for a significant amount of the psychological IPV variability, $R^2 = .079$, $F$ (1, 57) = 4.86, $p = .03$, indicating that participants who identified as a visible minority tended to have higher scores on psychological IPV perpetration, victimization, and coercive control victimization. The second step evaluated whether minority stress predicted psychological IPV above and beyond the effects of this related demographic variable. Internalized homophobia and discriminatory experiences did not account for a significant proportion of the variance in psychological IPV after controlling for the effects of identity as a visible minority, $R^2$ change = .015, $F$ (1, 55) = 0.457, $p = .64$ (see Table 8). Therefore, contrary to expectations, minority stress was also not significantly associated with either physical or psychological IPV.

Table 8

*Hierarchical Multiple Regression Analysis for the Prediction of Psychological IPV by Experiences of Heterosexism and Discrimination*

| Variable | *B* | *SE B* | β | $R^2 (\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .079* |
| Identity as a visible minority | -24.63 | 11.17 | -0.28* | |
| Step 2 | | | | .094 (.015) |
| Identity as a visible minority | -30.50 | 12.90 | -0.35* | |
| Internalized homophobia | -0.18 | 0.19 | -0.14 | |
| Discrimination/heterosexism | 0.01 | 0.17 | 0.01 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

## Goal Two: Minority Stress and Attachment

**Hypothesis four.** It was predicted that both internalized homophobia and experiences of heterosexism and discrimination would be associated with greater attachment insecurity. Specific associations between type of minority stress and type of attachment insecurity were exploratory in nature. I conducted a hierarchical linear regression for two sets of predictors in order to determine whether minority stress independently predicts anxious attachment above and beyond the impact of identifying as a visible minority. Step one indicated that identity as a visible minority accounted for a significant amount of anxious attachment variability, $R^2 = .089$, $F$ (1, 58) = 5.65, $p = .02$, indicating that participants who identified as a visible minority tended to have higher scores on attachment anxiety. The second step evaluated whether minority stress predicted anxious attachment beyond the effect of identity as a visible minority. Internalized homophobia and discrimination did not account for a significant proportion of the variance in attachment anxiety after controlling for the effects of identity as a visible minority, $R^2$ change = .041, $F$ (1, 56) = 1.31, $p = .28$, (see Table 9).

Table 9

*Hierarchical Multiple Regression Analysis for the Prediction of Anxious Attachment by Internalized Homophobia and Experiences of Discrimination*

| Variable | *B* | *SE B* | β | $R^2 (\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .089* |
| Identity as a visible minority | -0.99 | 0.42 | -0.30* | |
| Step 2 | | | | .129 (.041) |
| Identity as a visible minority | -0.77 | 0.46 | -0.23 | |
| Internalized homophobia | 0.01 | 0.01 | 0.20 | |
| Discrimination/heterosexism | -0.01 | 0.01 | -0.12 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

I also conducted a hierarchical linear regression for two sets of predictors to determine whether minority stress independently predicts avoidant attachment. Again, step one indicated that identity as a visible minority accounted for a significant amount of avoidant attachment variability, $R^2 = .099$, $F(1, 58) = 6.35$, $p = .01$. The second step evaluated whether internalized homophobia and heterosexist and discriminatory experiences predicted avoidant attachment beyond the effect of identity as a visible minority. Together, both types of minority stress accounted for a significant proportion of the variance in attachment avoidance even after controlling for the effects of identity as a visible minority, $R^2$ change = .173, $F(1, 56) = 6.65$, $p = .003$, (see Table 10).With regard to individual types of minority stress, internalized homophobia accounted for a significant proportion of the $R^2$ change ($\beta = 0.46$, $p = .001$) but experiences of discrimination did not significantly predict avoidant attachment after the effects of identity as a visible minority and internalized homophobia were accounted for ($\beta = 0.01$, $p = .97$).

Overall, internalized homophobia significantly predicted avoidant, but not anxious, attachment beyond the effect of identity as a visible minority. Experiences of discrimination were not a significant predictor of avoidant or anxious attachment.

Table 10

*Hierarchical Multiple Regression Analysis for the Prediction of Avoidant Attachment by Internalized Homophobia and Heterosexist and Discriminatory Experiences*

| Variable | *B* | *SE B* | β | $R^2(\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .099* |
| Identity as a visible minority | -0.92 | 0.37 | -0.31* | |
| Step 2 | | | | .272 (.173)** |
| Identity as a visible minority | -0.33 | 0.37 | -0.11 | |
| Internalized homophobia | 0.02 | 0.01 | 0.46*** | |
| Discrimination/heterosexism | 0.00 | 0.01 | 0.01 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

## Goal Three: Adult Attachment and IPV

**Hypothesis five.** Attachment avoidance and anxiety were expected to be associated with physical IPV. I conducted a hierarchical linear regression for two sets of predictors to determine whether attachment avoidance and anxiety independently predict physical IPV beyond the effect of the related demographic variable (identity as visible minority). Step one indicated that identity as a visible minority accounted for a significant amount of physical IPV, $R^2 = .126$, $F(1, 57) = 8.26$, $p = .006$, indicating that participants who identified as a visible minority tended to have higher scores on physical IPV. The second step evaluated whether anxious and avoidant attachment predicted physical IPV beyond the effect of identity as a visible minority. Anxious and avoidant attachment did not account for a significant proportion of the variance in physical IPV after controlling for the effects of identity as a visible minority, $R^2$ change = .079, $F(1, 55) = 2.74$, $p = .07$, (see Table 11). Thus, identifying as a visible minority, anxious attachment, and avoidant attachment account for 20.6% of the variance in physical IPV. Both types of attachment predicted an additional 8% of the variation in physical IPV, but this was not statistically significant.

Table 11

*Hierarchical Multiple Regression Analysis for the Prediction of Physical IPV by Anxious and Avoidant Attachment*

| Variable | *B* | *SE B* | β | $R^2 (\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .126** |
| Identity as a visible minority | -6.50 | 2.26 | -0.36** | |
| Step 2 | | | | .206 (.079) |
| Identity as a visible minority | -4.42 | 2.37 | -0.24 | |
| Attachment Anxiety | 0.42 | 0.77 | 0.08 | |
| Attachment Avoidance | 1.68 | 0.91 | 0.26 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

**Hypothesis six.** Attachment avoidance and anxiety were expected to be associated with psychological IPV. I conducted a hierarchical linear regression for two sets of predictors in order to determine whether attachment avoidance and anxiety independently predict psychological IPV above and beyond the related demographic variable (identity as visible minority). Step one indicated that identity as a visible minority accounted for a significant amount of psychological IPV, $R^2 = .079$, $F$ (1, 57) = 4.86, $p = .03$, indicating that participants who identified as a visible minority tended to have higher scores on psychological IPV. The second step evaluated whether anxious and avoidant attachment predicted psychological IPV beyond identity as a visible minority. Taken together, the attachment variables accounted for an additional and significant proportion of the variance (12.5%) in psychological IPV after controlling for the effects of identity as a visible minority, $R^2$ change = .125, $F$ (1, 55) = 4.33, $p = .02$, (see Table 12).

Table 12

*Hierarchical Multiple Regression Analysis for the Prediction of Psychological IPV by Attachment Avoidance and Anxiety*

| Variable | *B* | *SE B* | β | $R^2 (\Delta R^2)$ |
|---|---|---|---|---|
| Step 1 | | | | .079* |
| Identity as a visible minority | -24.63 | 11.17 | -0.28* | |
| Step 2 | | | | .204 (.125)* |
| Identity as a visible minority | -12.35 | 11.37 | -0.14 | |
| Attachment anxiety | 6.12 | 3.75 | 0.24 | |
| Attachment avoidance | 5.87 | 4.16 | 0.20 | |

*Note.* A lower score on identity as a visible minority represents a participant who identified as a visible minority.
* $p < .05$, ** $p < .01$, *** $p < .001$.

**Goal Four: Attachment as a Mediator**

**Hypothesis seven.** To determine whether attachment mediates the relationship between minority stress (specifically internalized homophobia) and physical IPV, I conducted a multiple parallel mediation model, which examines two mediators (attachment anxiety and attachment avoidance) simultaneously, according to the procedures outlined by Hayes (2013) using the SPSS 27 Macro: "Process". Internalized homophobia, but not experiences of discrimination, was used as the predictor related to minority stress because, in earlier analyses, experiences of discrimination were not significantly associated with key variables of interest (e.g., attachment or IPV).

A parallel multiple mediation revealed that, while controlling for identity as a visible minority, internalized homophobia did not influence physical IPV through its association with avoidant or anxious attachment. As presented in Figure 2 and Table 13, internalized homophobia was not significantly associated with anxious attachment ($a_1$ = .008, $p$ = .26). However, participants who reported greater levels of internalized homophobia had higher scores on the avoidant attachment scale than those who reported less internalized homophobia ($a_2$ = .018, $p$ = .001). Neither anxious attachment ($b_1$ = .409, $p$ = .60) nor avoidant attachment ($b_2$ = 1.89, $p$ = .06) predicted physical IPV. The bias-corrected bootstrap confidence intervals for the specific indirect effect of internalized homophobia on physical IPV through avoidant attachment based on 5,000 bootstrap samples straddled zero (-.016 to .095), thus indicating the indirect effects are not significant. Additionally, a bias-corrected bootstrap confidence interval for the specific indirect effect of internalized homophobia on physical IPV through anxious attachment based on 5,000 bootstrap samples also straddled zero (-.011 to .022), thus indicating the indirect effects are not significant. The total indirect effect of internalized homophobia on physical IPV through both types of attachment was also not significant based on 5,000 bootstrap samples

which straddled zero (-.014 to .098). Thus, there was no evidence for either a direct effect of internalized homophobia on physical IPV or an indirect effect of internalized homophobia on physical IPV through attachment.

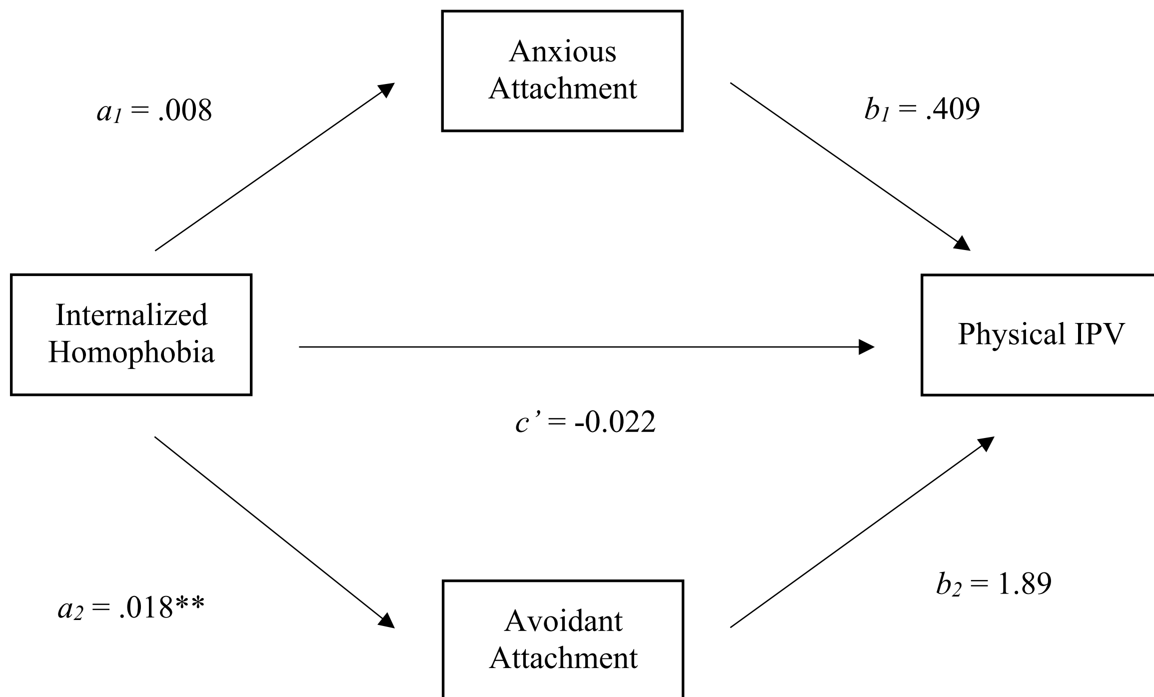


*Figure 2.* Parallel mediation model for internalized homophobia, anxious attachment, avoidant attachment, and physical IPV.

*Note.* * = $p < .05$; ** = $p < .01$

Table 13

*Model Coefficients for the Mediation of Internalized Homophobia and Physical IPV by Anxious and Avoidant Attachment*

| | | $M_1$ (Anxious) | | | | $M_2$ (Avoidant) | | | | Y (Physical IPV) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | *SE* | *p* | | Coeff. | *SE* | *p* | | Coeff. | *SE* | *p* |
| X (Internalized Homophobia) | $a_1$ | 0.008 | 0.007 | .26 | $a_2$ | 0.018 | 0.005 | .001 | **c'** | -0.022 | 0.040 | .58 |
| $M_1$ (Anxious Attachment) | | - | - | - | | - | - | - | $b_1$ | 0.409 | 0.776 | .60 |
| $M_2$ (Avoidant Attachment) | | - | - | - | | - | - | - | $b_2$ | 1.89 | 0.997 | .06 |
| Constant | $i_{M1}$ | 3.940 | 1.204 | .002 | $i_{M2}$ | 1.639 | 0.937 | .09 | $i_Y$ | 7.41 | 3.32 | .015 |
| | | $R^2 = .115$ | | | | $R^2 = .271$ | | | | $R^2 = .210$ | | |
| | | $F$ (2, 56) = 3.65, $p$ =.03 | | | | $F$ (2, 56) = 10.42, $p$ <.001 | | | | $F$ (4, 54) = 3.59, $p$ = .01 | | |

**Hypothesis eight.** To determine whether attachment mediates the relationship between minority stress (specifically internalized homophobia) and psychological IPV, I conducted a multiple parallel mediation model, which examines two mediators (attachment anxious and attachment avoidance) simultaneously.

The parallel multiple mediation revealed that internalized homophobia influenced psychological IPV through its total indirect effect on avoidant and anxious attachment. As presented in Figure 3 and Table 14, there was a significant direct effect of internalized homophobia on psychological IPV (c' = -0.452, $p$ = .02). Thus, with attachment as a mediator included in the model, the direct effect of internalized homophobia was both significant and negative. In contrast, without adding attachment into the model, these variables were not significantly correlated and internalized homophobia did not predict psychological IPV in the hierarchical linear regression in goal one - hypothesis two; see Table 3 and Table 8).

As in the previous model, internalized homophobia did not significantly influence anxious attachment ($a_1$ = .006, $p$ = .38) and participants who reported greater levels of internalized homophobia had higher scores on the avoidant attachment scale compared to those who reported less internalized homophobia ($a_2$ = .022, $p$ < .001). Participants who were higher in their reported anxious attachment did not report higher levels of past year psychological IPV ($b_1$ = .499, $p$ = .17). In contrast to the findings for physical IPV, participants who were higher in their reported avoidant attachment did report higher levels of past year psychological IPV ($b_2$ = 10.96, $p$ = .02). The bias-corrected bootstrap confidence intervals for the specific indirect effect of internalized homophobia on psychological IPV through anxious attachment based on 5,000 bootstrap samples straddled zero (-.037 to .169), thus indicating the specific indirect effects were not significant. Similarly, the specific indirect effect of internalized homophobia on

psychological IPV through avoidant attachment also straddled zero (-.021 to .568), thus indicating a non-significant specific indirect effect. However, the total indirect effects of internalized homophobia on psychological IPV through both types of attachment was statistically significant and based on 5,000 bootstrap samples did not straddle zero (.006 - .607). Therefore, internalized homophobia indirectly influenced psychological IPV through its overall effect on insecure attachment.

Because the direct effect is negative and the total indirect effects are positive, this is considered an inconsistent mediation model as it would be expected that a positive indirect effect would mean the independent variable (IV) and dependent variable (DV) are also positively associated (e.g., because the IV leads to an increase in the mediator which leads to an increase in the DV, the IV would be expected to also be positively associated with the DV; Mackinnon, Krull, & Lockwood, 2000). There was no correlation ($r = .04$, $p = .75$) between the independent variable (internalized homophobia) and the dependent variable (psychological IPV), yet the direct effect is significant once the mediator (attachment) is included in the model. Thus, internalized homophobia is associated with greater attachment insecurity which is associated with greater reported psychological IPV; however, this positive effect cancels out the negative effect of internalized homophobia on psychological IPV, which is why there was no total effect when the relationship between internalized homophobia and psychological IPV was looked at alone (Mackinnon et al., 2000). Yet, both the indirect and direct relationships are significant suggesting that internalized homophobia does increase psychological IPV through its effect on attachment insecurity, yet greater endorsement of internalized homophobia also predicts less psychological IPV. Thus, these findings depict a significant yet inconsistent mediation model.

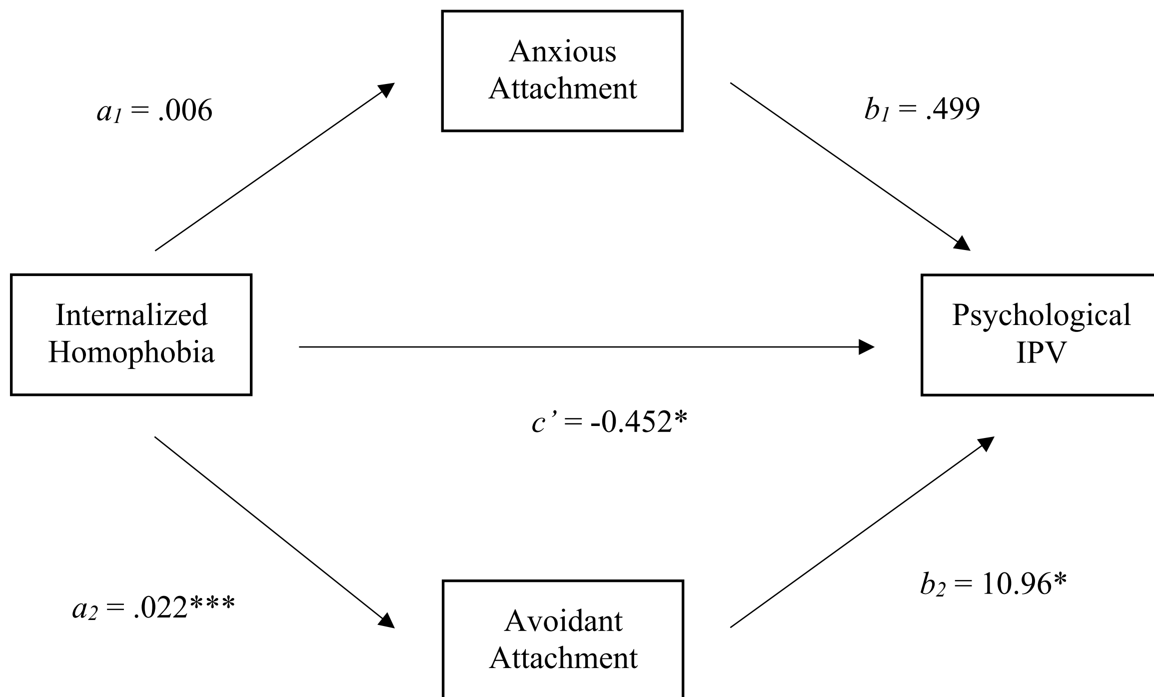


*Figure 3.* Parallel mediation model for internalized homophobia, anxious attachment, avoidant attachment, and psychological IPV.

*Note.* * = $p < .05$; ** = $p < .01$, *** = $p < .001$

Table 14

*Model Coefficients for the Mediation of Internalized Homophobia and Psychological IPV by Anxious and Avoidant Attachment*

| | | $M_1$ *(Anxious)* | | | | $M_2$ *(Avoidant)* | | | | *Y (Psychological IPV)* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Coeff. | *SE* | *p* | | Coeff. | *SE* | *p* | | Coeff. | *SE* | *p* |
| X (Internalized Homophobia) | $\boldsymbol{a_1}$ | 0.006 | 0.007 | .38 | $\boldsymbol{a_2}$ | 0.022 | 0.006 | <.001 | **c'** | -0.452 | 0.191 | .02 |
| $M_1$ (Anxious Attachment) | | - | - | - | | - | - | - | $\boldsymbol{b_1}$ | 4.99 | 3.64 | .17 |
| $M_2$ (Avoidant Attachment) | | - | - | - | | - | - | - | $\boldsymbol{b_2}$ | 10.96 | 4.54 | .02 |
| Constant | $\boldsymbol{i_{M1}}$ | 4.44 | 1.27 | <.001 | $\boldsymbol{i_{M2}}$ | 0.75 | 1.02 | .46 | $\boldsymbol{i_Y}$ | 62.00 | 33.87 | .07 |
| | | $R^2 = .131$ | | | | $R^2 = .289$ | | | | $R^2 = .279$ | | |
| | | $F$ (2, 56) = 4.20, $p$ = .02 | | | | $F$ (2, 56) = 11.40, $p$ <.001 | | | | $F$ (4, 54) = 5.22, $p$ = .001 | | |

## COVID-19 Hypotheses

Three hypotheses were tested using Pearson correlations to determine how psychological symptoms and stress related to the pandemic were associated with IPV and attachment.

**Hypothesis nine.** To determine whether an increase in psychological symptoms (anxiety, sadness, grief, and loneliness) since the onset of the COVID-19 pandemic and related restrictions is associated with an increase in IPV since the pandemic onset, I conducted two Pearson correlations. A post-pandemic increase in psychological symptoms was not significantly positively associated with an increase in physical IPV ($r$ = .18, $p$ = .21) or psychological IPV ($r$ = .18, $p$ = .20).

**Hypothesis ten.** To determine whether an overall increase in relationship stress related to the COVID-19 pandemic is associated with an increase in IPV, I conducted two Pearson correlations. Relationship stress and conflict related to the pandemic onset was significantly positively associated with psychological IPV change since the pandemic onset ($r$ = .49, $p$ < .001) but not physical IPV ($r$ = .27, $p$ = .06). Thus, individuals who reported an increase overall relationship stress and conflict related to changes with health, at work, with childcare, and with their relationship since the onset of the pandemic were more likely to also report an increase in psychological IPV since the pandemic onset.

**Hypothesis eleven.** To determine whether attachment anxiety and attachment avoidance are significantly negatively correlated with feelings of closeness to one's partner after the onset of COVID-19, I conducted two Pearson correlations. Attachment anxiety was not significantly negatively correlated with feelings of closeness ($r$ = -.19, $p$ = .14) and neither was attachment avoidance ($r$ = -.17, $p$ = .20).

## Discussion

This investigation explored internalized homophobia, experiences of heterosexism and discrimination, attachment strategies, and IPV in women's same-gender relationships. As expected, the current study revealed high rates of heterosexism and discrimination and IPV among LGBTQ+ women. That is, it was common for LGBTQ+ women to report experiencing many different types of heterosexism and discrimination within the past year, such as being called derogatory names like 'fag' or 'dyke', rejection from family members, and hearing of traumatic events happening to other members of the LGBTQ+ community. Consistent with previous research (e.g., Pepper & Sand, 2015), both physical and psychological IPV as well as coercive control also occurred at high rates within the past year in this sample of women in same-gender relationships. Consistent with the research findings for heterosexual couples, the current study also found a significant correlation between IPV perpetration and victimization, indicating that partner violence often is bi-directional (Langhinrichsen-Rohling, Misra, Selwyn & Rohling, 2012; Renner & Whitney, 2012). Contrary to expectations, neither internalized homophobia nor experiences of heterosexism and discrimination predicted psychological or physical IPV for women in same-gender relationships. However, women who reported higher levels of internalized homophobia (i.e., endorsement of society's negative rhetoric about LGBTQ+ people) reported greater attachment avoidance (e.g., feeling unsafe or uncomfortable being dependant on their partner). In turn, women who reported greater attachment insecurity were at greatest risk for psychological IPV. A parallel mediation model revealed that internalized homophobia is related to psychological IPV through its total indirect effect on attachment insecurity; specifically, women who report this greater belief in society's negative views of

LGBTQ+ people are more likely to report increased attachment anxiety and attachment avoidance which is subsequently associated with reports of higher psychological IPV.

**IPV Prevalence**

Overall, physical and psychological IPV were common and bidirectional within this sample of women in same-gender relationships. The current study found perpetration and victimization of both physical and psychological IPV were significantly correlated. This is consistent with a study examining IPV in over 10,000 young adults that found most participants reported reciprocal IPV (e.g., endorsing both IPV perpetration and victimization; Renner & Whitney, 2012). Thus, the current findings are aligned with findings for heterosexual participants, such that IPV is often bidirectional for women in same-gender relationships too.

The current study found about one in five participants endorsed at least one physical perpetration IPV item and one physical victimization IPV item; specifically, 19% of the women had experienced physical violence and 17% of the women had perpetrated physical violence in their same-gender relationship within the past year. This is similar to prevalence rates found in other studies; for example, Pepper & Sand (2015) found 20.0% of their sample of women in same-gender relationships involved in LGBTQ+ groups at their universities reported physical assault victimization and 22.5% of their sample reported perpetration of physical partner violence within the past year.

As expected, the prevalence for psychological IPV was much higher than physical IPV, with almost two thirds of the sample endorsing psychological IPV perpetration and victimization. Again, this is similar to Pepper and Sand's (2015) work where 72.5% of their sample reported psychological IPV perpetration and 67.5% reported psychological IPV victimization within the past year. The women in the current sample most commonly experienced low severity behaviours, however both perpetration and victimization tended to occur more than one time in

the past year. For example, “shouted or yelled at my partner,” was the most endorsed item and most participants reported this happened repeatedly over the previous year (e.g., 17% reported this occurred three to five times, 16% reported this occurred six to ten times, and 8% reported this occurred more than eleven times in the past year). Over a third of participants in the current study also endorsed at least one item from the coercive control victimization scale indicating their partner had exerted some form of control over them in the past year (e.g., their partner was limiting their activities and social supports, threatening them, or using blame to exert control over the relationship).

It is clear for the women in this study and previous research findings in Canadian and American sexual minority women, IPV is occurring at high rates and likely with deleterious consequences. Given this, further research and community resources designed specifically for sexual minority women, trans women, and gender non-confirming individuals is critical.

**Daily Heterosexist Experiences and Discrimination Prevalence**

The current study measured both the occurrence and impact of heterosexist and discriminatory experiences for LGBTQ+ women in same-gender relationships. Unfortunately, 100% of participants endorsed at least one potentially distressing experience of heterosexism and/or discrimination within the past year. These experiences included a range of microaggressions and hate crimes including being called offensive names, being rejected by family members based on sexual orientation and/or gender identity, feeling chronically ‘on guard’ because of one’s sexual orientation and/or gender identity, being harassed and treated unfairly based on sexual orientation and/or gender identity, and being assaulted because of one’s identity as LGBTQ+. The vast majority of women also reported experiencing discrimination, most commonly being called names such as ‘fag’ or ‘dyke’ or being stared at in public because of one’s LGBTQ+ identity. Most participants reported being extremely bothered by this,

although a small proportion reported not being bothered. Unfortunately, some of the women in the sample also endorsed severe victimization within the past year, specifically being sexually harassed because of their LGBTQ+ identity. The majority of participants reported vigilance (watching what one does or says around heterosexual people) and vicarious trauma (hearing about hate crimes that happened to other LGBTQ+ people). Despite these experiences appearing less severe given these crimes or discriminatory experiences had not happened yet and/or did not happen to the participant, these items were reported as highly distressing. Hearing of egregious hate crimes and discrimination might serve as a persistent reminder to these women that they are unsafe in the world and are in danger of being brutally treated and/or attacked just for existing as an LGBTQ+ person. Given this, the impact and detrimental effects of hearing how unsafe it is to live as an LGBTQ+ person through exposure to vicarious trauma should not be underestimated. Lastly, most of the sample endorsed feelings of isolation from the LGBTQ+ community, such as having difficulty finding LGBTQ+ friends, which also may have been exacerbated by the pandemic. Given how critical feeling connected to the LGBTQ+ community is for improving the health and well-being of LGBTQ+ people, this finding is concerning (Jackson, 2017; Johns et al., 2013; Wardecker & Matsick, 2020).

**Internalized Homophobia in LGBTQ+ Women in Relationships**

The women in same-gender relationships who participated in this study have similar levels of internalized homophobia as in other studies (Piggot 2004; Ummak, Toplu-Demirtas, & Jessen, 2021). The current study's average score of 2.17 is fairly low on a six-point Likert scale, however this is consistent with the literature which has found it is hard to detect higher rates of internalized homophobia when collecting data from samples that voluntarily identify as LGBTQ+ and are 'out' enough to participate in a study (Carvalho, Lewis, Derlega, Winstead, & Viggiano, 2011). Despite these relatively low average scores, this level of internalized

homophobia still indicates that discomfort with one's identity and in interacting with heterosexual individuals and the rest of the LGBTQ+ community still exists. Furthermore, even these low levels of internalized homophobia have been associated with high levels of depression and low levels of self-esteem, meaning it is still clinically meaningful (Piggott, 2004).

**Attachment in LGBTQ+ Women in Relationships**

Overall, average levels of both attachment anxiety and avoidance were similar, but slightly lower than in other samples of women in relationships. However, it was difficult to compare attachment findings from the current study to previous research as studies on attachment in LGBTQ+ women in relationships have been sparse. The current study uniquely contributes to the current body of literature with the finding that these LGBTQ+ women in relationships were, overall, quite securely attached and had similar or slightly lower levels of attachment avoidance and anxiety compared to heterosexual people in relationships. Many of the risk factors for IPV are the same for heterosexual couples and LGBTQ+ couples (e.g., attachment, mental health, substance use). However, often these risk factors are exacerbated in people with minority identities as they may inevitably experience a great deal of oppression (e.g., substance use is greater in LGBTQ+ individuals which has been associated with experiences of minority stress). It was expected that insecure attachment would also be higher for LGBTQ+ women due to their experiences of oppression and possible familial rejection. However, this was not supported by the current study as attachment was similar or slightly lower compared to heterosexual women's reported attachment avoidance and anxiety.

Research has examined whether being in a relationship might move an individual's attachment toward greater security in heterosexual couples. It is possible that relationships are particularly protective for LGBTQ+ women for whom attachment may be uniquely shaped by their peer and romantic relationships (Cook & Calebs, 2016). Although evidence suggests that

attachment is quite stable throughout childhood and adolescence, for those who are insecurely attached, the shift to a secure attachment style later in life is very possible (Crowell, Treboux, & Waters, 2002). Perhaps especially for LGBTQ+ individuals, who are more likely to have been rejected by family members, other relationships may be particularly critical in shaping attachment later in life (Sherry, 2007). In Crowell and colleague's (2002) investigation of attachment stability in newly married heterosexual couples, two thirds of those classified as having an insecure attachment style 3 months before marriage were classified as securely attached 18 months after marriage. Thus, it is possible that with the consistent and positive influence of an attachment figure different from the childhood attachment figure, an individual can shift from insecurely to securely attached (Crowell et al., 2002). Given this, it is possible that LGBTQ+ women in relationships are more securely attached than women who are not currently in a relationship. Additionally, the majority of the women in the current sample reported feeling closer to their partner since the onset of the pandemic. Thus, it is possible that this had a positive impact on their reported attachment.

**Minority Identities and Risk for IPV, Discrimination, and Attachment Insecurity**

Participants who identified as a visible minority were significantly more at risk for IPV, insecure attachment, and greater internalized homophobia. This is consistent with previous research that has found multiple minority identities (also referred to as double or even triple jeopardy) intersect to exacerbate or differentially impact minority stress and related outcomes for BIPOC (Black, Indigenous, and People of Colour) LGBTQ+ people (Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Hughes, Johnson, & Matthews, 2008; Zamboni & Crawford, 2007). Thus, it is pertinent that the oppressive experiences related to every minority identity and intersection of those identities be uniquely studied and considered. For example, an in-depth intersectional analysis could address how historical trauma, stigma, micro and macro

aggressions, and structural racism and systems contribute to one's lifetime experience of trauma and the subsequent burden of disease. For example, models like the extended Adverse Childhood Experiences (ACE) diagram provide a framework for understanding one's current life experiences from a trauma-informed and violence-informed lens (RYSE Centre, 2016).

Given previous research has found that bisexual women are more at risk than other sexual orientations, the current study examined how one's identity as bisexual may influence IPV, attachment, and minority stress compared to participants with other identities (e.g., lesbian, pansexual, queer, gay). The current study found lower rates of IPV for women who identify as bisexual, but higher rates of internalized homophobia. The finding that IPV was lower for bisexual participants was contrary to expectations, however the current study also included sexual orientation identities such as queer and pansexual which were subsumed by the 'other sexual orientation identities' category. In previous research, participants were only able to identify as gay/lesbian or bisexual. Thus, it is possible that some participants who did not identify as bisexual, but identified as queer or pansexual, would have been categorized as bisexual in previous research. Furthermore, previous research has focused on individuals who identify as bisexual but are not necessarily currently in a relationship with a same-gender partner. These studies have found that bisexual women were most likely to be victimized by an opposite-gender partner (Jaffray, 2020; Messinger, 2011). Thus, higher IPV prevalence rates found in previous research on bisexual women may reflect a greater risk for IPV by an opposite-gender partner.

Given how different minority identities interact to uniquely shape risk and protective factors, it is likely that participants who identify as trans, non-binary and two-spirit experience minority stress, attachment, and IPV differently. Unfortunately, in the current sample there were

only three participants who did not identify as cisgender, which was not a large enough group to determine any statistical differences. However, these three participants identifying as non-binary and two-spirit had much higher scores on internalized homophobia, heterosexist experiences, anxious attachment, avoidant attachment, and psychological IPV. Thus, although statistics estimating significance were not calculated due to small sample size, research examining differences for gender non-conforming people and trans women will be critical in exploring the added risk transphobia has on IPV, minority stress, and insecure attachment.

**COVID-19, Psychological Symptoms, Relationship Stress, and IPV**

The impact of the global pandemic on the variables of interest in the current study were evaluated given data collection occurred during the first several months of the pandemic (May 2020 until September 2020). Although it varied by region, measures to reduce the spread of COVID-19 (e.g., stay at home orders, work from home, virtual learning, physical distancing) began in mid-March and continued in some form throughout 2020. During this time, anxiety, sadness, grief, and loneliness all increased in the current sample of LGBTQ+ women in relationships compared to before the pandemic began. Relationship conflict related to work, money, working from home, overall stress, emotional health, and physical health also increased for those in our sample since the start of the pandemic. Despite this, feelings of closeness to one’s partner increased during this time. Many participants wrote about feeling closer to their partner and feeling more connected because of the increased time spent together. For some participants, this time was stressful and impacted IPV in the relationship as well as their mental health. However, overall, most participants did not report an increase in psychological or physical IPV since the onset of COVID-19. Only one participant reported an increase in physical IPV victimization, and no participants reported an increase in physical IPV perpetration. Seven participants reported an increase in psychological IPV victimization, and ten participants

reported an increase in psychological IPV perpetration. Thus, the impact of the pandemic differentially impacted relationships; for some participants it led to increased closeness and reduced IPV, for others there were no reported changes, and for a small proportion it led to increase conflict and IPV, particularly psychological IPV. It is notable overall however to note that the pandemic negatively impacted self-reported mental health symptoms and overall stress for most participants. As the data were collected early in the pandemic, further research is needed to examine how relationship conflict and IPV have changed as the pandemic has continued for over a year.

**Internalized Homophobia, Heterosexism, LGBTQ+ Discrimination and IPV**

Contrary to expectations, internalized homophobia and daily heterosexist and discriminatory experiences were not found to be significantly associated with either psychological or physical IPV. Previous research on the association between different facets of minority stress and IPV has produced mixed findings. Balsam and Szymanski (2005) found that internalized homophobia had a small to moderate association ($r$ = .22) with physical and sexual victimization within the past year and a small to moderate association ($r$ = .19) with physical or sexual perpetration within the past year. In their study, the relationship between internalized homophobia and IPV was fully mediated by relationship satisfaction, such that women who reported higher internalized homophobia also reported greater relationship dissatisfaction which was associated with reporting more experiences of IPV. Experiences of discrimination only within the previous year were not significantly related to IPV. However, lifetime experiences of discrimination were moderately associated ($r$ = .30) with lifetime psychological IPV and small to moderately associated ($r$ = .20) with lifetime physical and sexual violence (Balsam & Szymanski, 2005). The current study measured discriminatory experiences within the past year.

It is possible that this timeframe did not capture the chronic and additive effects of heterosexism and discrimination and their subsequent impact on related variables such as attachment and IPV.

Longobardi and Badenes-Ribera (2017) conducted a systematic review of the previous ten years of research examining correlates of IPV in same-gender couples. Findings from 2005 to 2015 were largely inconsistent regarding the association between internalized homophobia and IPV in women's same gender relationships. Although several studies found internalized homophobia was indeed significantly related to physical, sexual, and psychological IPV, several others using similar measures did not find a statistically significant relationship. For example, Carvalho, Lewis, Derlega, Winstead, Viggiano (2011) did not find an association between internalized homophobia and IPV for women in same-gender relationships. The authors of the study noted that there was a restricted range of internalized homophobia in their study which commonly occurs as it is difficult to recruit participants with high levels of internalized homophobia because they are typically not 'out.' Additionally, the measure of IPV in this study was limited to a single question, "Have you ever been a victim of domestic violence?" and "have you ever been a perpetrator of domestic violence?" Thus, it is possible that using a single-question measure may not have captured some of the more insidious and chronic forms of IPV such as psychological IPV or controlling behaviours.

Similarly, the systematic review found mixed evidence for the association between discrimination and IPV (Longobardi & Badenes-Ribera, 2017). One study included in the review found experiences of discrimination were positively correlated with psychological IPV perpetration for LGBTQ+ youth. However, other studies did not find this association when other predictors (such as outness, internalized homophobia, and stigma consciousness) were included in the model (Longobardi & Badenes-Ribera, 2017). This demonstrates how larger models

including many related variables may be especially critical for understanding such complex relationships between minority stress and IPV. Given the strong relationship between discrimination and heterosexist experiences and other predictors of IPV (e.g., mental health, substance use), the lack of strong and consistent research finding an association between discrimination and IPV is surprising (Shenkman, Bos, & Kogan, 2019; Szymanski, 2006).

Thus, the current study's finding contributes to the existing body of research which is mixed in its understanding of the association between different aspects of minority stress and IPV in same-gender relationships. It is possible that measuring experiences of discrimination and IPV occurring within the past year did not capture the chronic and lifelong patterns which are critical to understanding both experiences of discrimination and their effect on lifetime IPV. However, this direct link between internalized homophobia and IPV changed once attachment was included in the model which will be discussed further below. This finding supports the emerging research which suggests that more complex models including mediators and other types of intermediatory variables may allow us to further understand the complex links between minority stress and IPV.

**Minority Stress and Attachment**

In partial support of the hypotheses, internalized homophobia was found to be associated with avoidant, but not anxious, attachment for women in same-gender relationships in this study. Experiences of discrimination within the past year were not found to be associated with attachment. Research examining attachment in LGBTQ+ people and the impact of minority stress on attachment is sparse. However, the research that does exist suggests that minority stress is associated with greater attachment insecurity (Cook & Calebs, 2006; Keating & Muller, 2020; Ridge & Feeney, 1998; Sherry, 2007). Specifically, Ridge and Feeney (1998) found women in same-gender relationships had lower attachment anxiety and higher attachment avoidance compared to heterosexual women in opposite-gender relationships. Sherry (2007) found that

preoccupied and fearful attachment styles were associated with internalized homophobia. A preoccupied attachment style is characterized by high attachment anxiety and low attachment avoidance whereas a fearful attachment style is characterized by both high attachment anxiety and attachment avoidance. In the current study, internalized homophobia was significantly positively associated with avoidant, but not anxious, attachment. Thus, participants who reported internalizing more of society's negative beliefs about their sexual orientation were also more likely to endorse items representing attachment avoidance (e.g., preferring not to show one's feelings and thoughts to their partner, being uncomfortable with depending on their partner, etc.). Internalized homophobia's association with attachment insecurity can have far-reaching consequences. For example, we know attachment insecurity is associated with a host of mental and physical health challenges, such as increased risk for cardiovascular disease and disrupted immune responses (Pietromonaco & Beck, 2019). Subsequently, remedying the homophobia and transphobia in society will have extensive impacts that will likely improve many health outcomes for LGBTQ+ women.

Contrary to expectations, experiences of heterosexism and discrimination within the previous year was not associated with either type of attachment. It was predicted there would likely be an association between heterosexism and discriminatory experiences and attachment given the traumatic nature of these events and the established connection between trauma and attachment (Busch & Lieberman, 2007). Keating and Muller (2020) found that LGBTQ+ adults who experienced a traumatic experience related to their sexual orientation (e.g., life threatened because of one's sexual orientation, harassment related to sexual orientation) reported greater attachment anxiety and attachment avoidance. However, these discriminatory experiences were measured across the lifespan, not just within the past year like in the current study. In the current

study, past year heterosexism and discrimination was not associated with attachment anxiety or avoidance. However, again, it is possible that lifetime heterosexist and discriminatory experiences might be associated with attachment insecurity even when past year experiences are not. For example, even if a major event such as coming out and being met with rejection by a parental figure or experiencing a hate crime did not happen in the previous year, it's very likely it might have had a lasting impact on attachment security given how it might lead to feelings of unworthiness, betrayal, or having difficulty trusting others.

**Attachment and IPV**

As expected, participants who reported high levels of anxious attachment and avoidant attachment were more likely to report greater levels of psychological IPV. This finding was expected given how attachment insecurity is associated with fears of abandonment, rejection sensitivity, or an inability to trust one's partner which has the potential to heighten conflict in a relationship. However, this association was not significant for attachment insecurity and physical IPV after controlling for the effects of identifying as a visible minority. Thus, attachment might play a more significant role in psychological IPV compared to physical IPV for LGBTQ+ women in relationships.

Consistent with my overall findings, a recent meta-analysis found that both attachment anxiety and attachment avoidance were significant predictors of IPV (Velotti, Rogier, Beomonte Zobel, Chirumbolo, & Zavanttini, 2020). The meta-analysis included 369 articles which likely included mainly heterosexual individuals, although the number of LGBTQ+ studies was not reported. Attachment anxiety was significantly associated with physical violence with a small to moderate effect size ($r$ = .19), although the authors noted there was significant variability amongst the effect sizes within the included studies. Attachment anxiety was significantly associated with psychological violence with a moderate effect size ($r$ = .30). The meta-analysis

found significant associations, but with smaller effect sizes, for attachment avoidance and physical violence ($r$ = .12) and psychological violence ($r$ =.14; Velotti et al., 2020). Therefore, contrary to the current study, Velotti and colleagues (2020) found attachment anxiety was a stronger predictor of IPV than was avoidant attachment. In the current study, both attachment and avoidance were correlated with psychological and physical violence.

Although the current study did not include dyads, it is also possible that the influence of attachment on IPV is affected by the attachment match or mismatch between partners. For example, attachment avoidance in one member of a couple has been found to be associated with physical and psychological IPV perpetration when their partner was high in attachment avoidance or anxiety (Sommer, Babcock, & Sharp, 2017). The impact of match or mismatch in attachment strategies may be dependent on the type of IPV perpetration and victimization. For example, attachment anxiety has been found to influence sexual IPV perpetration regardless of a partner's attachment strategies (i.e., whether their partner was high in anxiety, avoidance, or securely attached; Sommer et al., 2017). Thus, it is possible that couple-factors such as the match between partners' attachment styles and type of IPV are influencing IPV for women in same-gender relationships.

Attachment avoidance has been theorized to influence IPV given its significant effect on relationship communication and satisfaction; for example, attachment avoidance may prime individuals to disengage from relationship issues or devalue the bond with one's partner, contributing to anger, violence, and an escalation during times of conflict (Velotti et al., 2020). Furthermore, in Doumas and colleagues' (2008) study of heterosexual couples, when a man's attachment style was highly avoidant and a woman's highly anxious, the risk for physical IPV was greatest. Thus, again, it is possible that when a same-gender couple is under stress and one

partner pursues closeness while the other attempts to meet their needs by using avoidant strategies, the possibility of IPV may increase. Similarly, Millwood and Waltz (2008) found that couples with one or both partners who were insecurely attached engaged in demand-withdrawal communication more often than couples where each partner was securely attached. Specifically, anxious attachment has been associated with greater conflict engagement whereas avoidant attachment has been associated with greater withdrawal during conflict (Bonache, Gonzalez-Mendez, & Krahé, 2016). There has been mixed research amongst LGBTQ+ women regarding how these dynamics are impacted by gender roles. Scott (2016) found that lesbian couples did not ascribe to heteronormative gender roles and each partner's gender characteristics did not map onto demand-withdrawal behaviours as would have been expected based on heterosexual norms. However, Baucom and colleagues (2010) found that levels of demand-withdrawal interactions were similar in women's same-gender relationships compared to heterosexual couples. Therefore, it is possible that for some women, attachment and gender characteristics may be influencing communication dynamics which may subsequently impact reported IPV.

**Indirect Effect of Minority Stress on IPV**

Although traditionally a mediation analysis was only conducted if the independent variable significantly predicted the dependent variable, more recently examining indirect relationships even in the absence of a direct relationship has proven both acceptable and useful in understanding complex relationships between variables (Hayes, 2009). Thus, although the hierarchical regressions conducted in the current study did not reveal a significant association between internalized homophobia and physical or psychological IPV, I conducted a simultaneous multiple mediation model to determine if there were any indirect effects of internalized homophobia on IPV through anxious and avoidant attachment. The direct, indirect, and total effects of internalized homophobia on physical IPV through attachment were not statistically

significant. However, internalized homophobia significantly predicted avoidant attachment which significantly predicted psychological IPV. The total indirect effects of internalized homophobia on psychological IPV through insecure attachment was positive and significant. Thus, internalized homophobia does in fact exert an effect on psychological IPV by increasing attachment insecurity which subsequently increases the likelihood of psychological IPV. Although the initial hierarchal regression did not find an association between internalized homophobia and either type of IPV, once attachment was included in the mediation model the direct effect became negative and significant. Thus, although internalized homophobia is associated with increased attachment insecurity, which in turn, is linked to greater psychological IPV, once the indirect relationship is considered, higher levels of internalized homophobia were associated with lower reported psychological IPV. In the statistical literature, this positive indirect effect and negative direct effect is known as inconsistent mediation model or a mediator which acts as a suppressor variable (MacKinnon, Krull, & Lockwood, 2000). Inconsistent mediation models have been interpreted in different ways; for example, some might view the direct relationship becoming significant and negative as simply a statistical by-product of including a relevant mediator (i.e., attachment) in the model. Others view this finding as meaningful; for example, MacKinnon, Fairchild, and Fritz (2007) gave the example of intelligence and widget production (2007). Although one might assume greater intelligence would be positively and significantly associated with widget production, no significant association was found. However, once boredom was included in the model, the direct relationship became positive and significant (e.g., intelligence increases widget production) and the indirect effects are negative (e.g., intelligence leads to increased boredom which leads to decreased productivity). Thus, it can be interpreted that boredom is the suppressor variable such

that it conceals the meaningful effect of intelligence on productivity making it appear non-significant until the relevant mediator is included in the model (MacKinnon, Fairchild, & Fritz, 2007). In the current study, the negative and significant relationship found between internalized homophobia and psychological IPV is possibly statistical noise and a by-product of including a significant mediator in the model. There is no evidence which I am aware of suggesting high internalized homophobia is a protective factor for psychological IPV, however there is little research in this area to begin with. It is possible that the match between partner's levels of internalized homophobia determines risk for IPV. Further research is required to determine how the match or mismatch of internalized homophobia interact between partners to shape risk for IPV and other relationship factors. It is possible that if both partners are high in internalized homophobia, they are at greater risk for IPV as they might both be projecting negative views of the LGBTQ+ community onto their partner. However, it is also possible they both agree on the extent to which they are 'out' in their community and are aligned in their views of self and the world, thus being a protective factor for IPV. It is possible that when there is a mismatch in internalized homophobia (e.g., one partner is high and the other is low) then the partner low in internalized homophobia acts as a positive model for the partner high in internalized homophobia and there is less risk for IPV. However, it is also possible that conflict arises as one person is comfortable with their sexual orientation and partner and subsequently is open with family, friends, and the community while the other partner remains fearful of disclosing their relationship and orientation. Thus, it is possible that high internalized homophobia could be protective against IPV when that person's partner is low in internalized homophobia and acting as a model or guide for the partner who is high in internalized homophobia and so there is little conflict in their views. However, it is also possible that there is no meaningful direct relationship

between internalized homophobia and psychological IPV and that internalized homophobia becomes a negative predictor as a statistical by-product of including attachment in the model.

**Limitations and Future Directions**

There were several limitations that may impact the interpretation of these results. Firstly, the demographic characteristics of the current sample may affect the generalizability of the results to all LGBTQ+ women in Canada and the United States. For example, the sample consisted primarily of Caucasian individuals. The current study showed that, in fact, identity as a visible minority significantly impacted minority stress, attachment, and IPV. Although the impact of holding a dual-minority identity was controlled for so that the current research could establish the impact of sexual orientation on variables of interest, examining differences in minority stress, attachment and IPV for intersecting minority identities is critical. Similarly, the current study was almost entirely composed of individuals who identify as cisgender. Like racialized women, individuals identifying as trans and non-binary hold intersecting minority identities which likely impact variables such as minority stress, attachment, and IPV. Additionally, the average age of the current sample was 30.41 (*Mdn* = 27), ranging from 19 to 57. Thus, older women in same-gender relationships were less represented in the current sample and an entire generation of women in same-gender relationships were missed, perhaps due to our exclusively online method of recruitment. Chopik and Edelstein (2014) found that attachment anxiety was highest among younger adults and decreased in middle-aged and older adults. Thus, it is possible that attachment works differently as a mediator in older adults. Additionally, given the continual progression of LGBTQ+ visibility and rights, it is possible older LGBTQ+ women experience greater minority stress which may subsequently impact attachment and IPV. Additionally, Mouton (2003) found IPV continues across the lifespan in a sample of 50- to 79-year-old women. In that sample, 5.25% endorsed physical past year IPV and 22.8% endorsed

psychological past year IPV. Given that approximately 20% of the population in North America is now over 60, it is critical to extend the current research to include older LGBTQ+ women (Statistics Canada, 2018; U.S Census Bureau, 2019).

The current study was also limited by a small sample size of 64. A larger sample size in future research would likely capture greater diversity in gender identity, age, and race/ethnicity. Additionally, a larger sample size would mean greater statistical power to detect statistically significant and meaningful connections between variables as the current study lacked power to detect small effect sizes in the main analyses. The current sample was also not screened to determine whether any participants were in a relationship with another participant. If this occurred, it may have led to dyadic data which might have biased the reported IPV data.

The current study also used self-report questionnaires to measure minority stress, attachment, and IPV. There are some inherent problems associated with these types of measures related to response bias. For example, a participant may feel pressure to provide the answers they believe the researcher is looking for. Additionally, some individuals may not feel comfortable reporting on highly sensitive topics such as minority stress and IPV in their own homes, given this is often where the abuse is occurring. This may also have contributed to selection bias, such that participants might have been more likely to participate from their homes if they were not experiencing IPV. Although the research asked about heterosexist experiences and IPV in the past year, it is still possible that people are exhibiting recall bias, the error caused by difficulty recalling events or experiences that happened, especially given the traumatic nature of these events. Additionally, as the current study did not include both partners in the relationship, it is possible that participants were underreporting their own IPV perpetration behaviours and overreporting their partners, although the current study's findings show a strong and significant

correlation between victimization and perpetration. Future research examining match between partner's minority stress and attachment and subsequent impact on IPV (e.g., dyad analyses) will be critical in further understanding IPV in women's same gender relationships.

The current study also measured attachment and internalized homophobia at one static point in time. Future longitudinal research is needed to determine how attachment style and internalized homophobia change over time. Specifically, does a decrease in internalized homophobia predict changes in attachment? Does a change in IPV relate to a change in attachment and internalized homophobia? Additionally, as activists continue to fight for a more accepting climate for LGBTQ+ people in North America, will additional resources for LGBTQ+ women impact minority stress, attachment, and IPV?

Although the current study was subject to some methodological shortcomings and it was conducted during the first wave of COVID-19, a unique and potentially dissimilar period in the participant's lives, it also employed a rigorous statistical method and model to gain a comprehensive understanding of potential mechanisms elucidating the relationship between minority stress and IPV in women's same gender relationships. Several unique findings and strategies will contribute notably to the literature. Firstly, LGBTQ+ women's experiences have rarely been investigated and reported on. Thus, even examining prevalence rates of IPV and heterosexist experiences and discrimination, as well as reporting on attachment strategies in this sample is a unique contribution to the literature. It is an interesting finding to have a snapshot of LGBTQ+ women's experiences of discrimination in Canada and the United States in 2020, which demonstrate that heterosexism and discrimination are vast and devastatingly common. Similarly, the research examined how COVID-19 impacted general mental health symptoms as well as IPV and uniquely contributed to the research demonstrating that stress, sadness,

loneliness, and grief have increased for most of the LGBTQ+ Canadian and American women in the sample. It also found that, despite this, reported IPV had not significantly increased within the first couple of months in the pandemic, although follow-up research is needed to determine how extended COVID-19 restrictions and stressors are impacting IPV. Additionally, instead of categorizing individuals into definitive attachment styles, the current study measured attachment on a continuum. This style of measurement will help to capture a more complex picture of how people can attach and interact with important others. The current study demonstrates the importance of attachment insecurity, and particularly attachment avoidance, as a risk factor for IPV for women in same-gender relationships. Future research should continue to examine how minority stress impacts attachment and other risk factors for IPV (e.g., substance use, mental health, and other known risk factors) for LGBTQ+ women. It is critical to continue to discover similarities and differences in how IPV risk factors function amongst LGBTQ+ people compared to heterosexual people. This is especially needed given the increased risk for IPV that research has consistently demonstrated to exist within this community compared to heterosexual couples. Furthermore, the LGBTQ+ community continues to face notable daily experiences of discrimination and trauma related to their sexual orientation and identity which only exacerbates these pre-existing risk factors and the overall health and well-being of LGBTQ+ people in North America.

## Clinical Implications

Not only does the current study contribute to the body of literature on minority stress and IPV in women's same-gender relationships, but it also has several important clinical implications. Given the high rates of daily heterosexist experiences, discrimination, and internalized homophobia (which are known risk factors for mental and physical health challenges; Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013; Lehavot & Simoni,

2011; Meyer & Northridge, 2007; Sandfort, Bakker, Schellevis, & Vanwesenbeeck, 2006) it is critical to continue to advocate for the rights and visibility of LGBTQ+ people. Specifically, education on the harms of so called 'micro' aggressions is essential to reducing the negative outcomes associated with living in a heterosexist and LGBTQ+ intolerant world.

Additionally, given the impact of attachment on IPV in women's same gender relationships, attachment-based therapies, specifically created with the impact of oppression on attachment in mind, may be helpful when working with LGBTQ+ couples. For example, working with couples to understand how their attachment may align or mismatch and how this contributes to conflict in their relationship might increase understanding between partners. Furthermore, exploring how one's attachment may have been impacted by LGBTQ+ based rejection and/or discrimination may provide individual insight into one's own triggers and fears.

Lastly, given the staggering prevalence rates of IPV in women in same-gender relationships, community-based services should work to enhance the inclusivity of their services by utilizing a trauma-informed and violence-informed practice to address structures which may unwittingly cause exclusion, marginalization, and harm. For example, by hiring LGBTQ+ workers and care providers, including LGBTQ+ people on boards and in decision making circles, advertising their services specifically for LGBTQ+ people, and providing unique services for LGBTQ+ people such as providing first point of contact (e.g., to report or do an intake for a services) with an LGBTQ+ care provider and offering groups which focus on the impact of minority stress on relationships, how gender ideas and roles contribute to conflict in LGBTQ+ women's relationships, and the effect of (in)visibility on their own experiences of IPV.

**Summary**

Women in same-gender relationships are experiencing significant experiences of discrimination and heterosexism as well as physical and psychological IPV. Internalized

homophobia contributes to attachment insecurity which is a significant risk factor for IPV in women's same-gender relationships. This study uniquely contributes to the literature and provides potential avenues for prevention, treatment, and future research. Specifically, the current study highlights the desperate need for increased activism to address systemic heterosexism and discrimination for LGBTQ+ women, and particularly LGBTQ+ women who also identify as a visible minority. Furthermore, increasing IPV services and resources for LGBTQ+ people, increasing visibility and awareness of IPV in same-gender relationships, and further research on the role of attachment in IPV in women's same-gender relationships is both warranted and critical for improving the health and well-being of LGBTQ+ women in North America.

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## Appendix A: Invitation to Participate

### Minority Stress and Relationships Study

We are researchers at the University of Victoria (UVic), in Victoria, British Columbia, Canada, who are conducting a questionnaire-based study on the links between minority stress, discrimination, expectations and beliefs about intimate relationships, and physical and psychological aggression within women's same-sex relationships.

In order to participate in the study, you must be **19 years of age or older, self-identify as a woman (including trans and non-binary women), currently in a same-sex relationship of at least three months duration, fluent in English, and live in Canada or the United States.**

All responses are **confidential** and **anonymous**. If you are interested in participating in this study, please respond privately to the survey and do not post your responses publicly, in order to maintain your privacy. The study will take about 30 minutes to complete. **PLEASE BE SURE TO ONLY COMPLETE THIS STUDY ONCE.**

In exchange for your appreciated time and effort, we are offering you the opportunity to enter a prize draw with about 20 chances to win either a $10, $15, or $20 gift certificate to Amazon.ca or Amazon.com, depending on your country of residence. Alternatively, you may request that we make a donation of $5 to the International Lesbian, Gay, Bisexual, Trans, and Intersex Association (ILGA). The option to have the researchers donate to the ILGA is available up to a total donation of $200; once this is reached, only the prize draw will be available.

If you are interested in participating in this study, please review the informed consent form first and then proceed to the study here:

[insert link]

If you have any questions, you may contact the researchers directly: Keara Rodd (principle researcher) at [msrsuvic@gmail.com] or Dr. Marsha Runtz (research supervisor) at runtz@uvic.ca.

**Appendix B: Questionnaires**
**Demographic Information**

To be eligible for this study, please confirm that you are 19 years of age or older, identify as a woman, and are currently in a romantic relationship with a woman that has continued for three or more months?
Yes
No

**If you answered no, thank you for your interest in our research. You can exit the survey by clicking the "exit survey" button at the top of this page. Otherwise, please continue with the survey.**

1. Where did you see the announcement for this study?
On Reddit
On a Meetup Victoria group
On FigureEight
Other (specify):

2. How old were you on your last birthday? _______

3a. How would you best describe yourself? (you may check off more than one)
Asian or Asian Indian
Black or African American/Canadian
Hispanic, Latina, or Spanish origin
Indigenous, Native Canadian/Native American, First Nations, Inuit, or Metis
Middle Eastern or North African
Native Hawaiian or Other Pacific Islander
White, Caucasian, or European American/Canadian
Some other race or ethnicity (please specify): __________________
Prefer not to say:

3b. Do you self-identify as a member of a visible minority group, as a person of colour, or as a racialized person?
Yes: _____ No ______

4. In what country were you born? ______
If not born in Canada or the US, at what age did you move to Canada or the US? _______

5a. What is your current country of residence?
Canada
United States of America
Other (specify)

5b. In what Province or State are you currently living? ______

6. What is the language you currently speak most often at home or in your day-to-day life?
English
French
Spanish
Other (specify):

7. Which of the following best describes your sexual orientation?
Straight or heterosexual
Gay or lesbian
Bisexual
Pansexual
Asexual
Queer
Questioning
Other (specify):
Prefer not to say

8. Which of the following best describes your gender?
Cisgender woman (i.e., assigned female sex at birth, identifies as a woman)
Trans woman
Non-binary woman
Two-Spirited
Other (specify):
Prefer not to say

9. What is the *highest level* of education you have *completed*?

No certificate, diploma or degree
High school diploma or equivalent
Trades certificate or diploma
College diploma or University certificate below bachelor level
Bachelor’s degree
University certificate above bachelor level
Medical degree
Master’s degree
Doctoral degree

10. What is the highest level of education obtained by your parents or the person(s) who raised you? If applicable, choose the parent with the highest level of education.
No certificate, diploma or degree
High school diploma or equivalent
Trades certificate or diploma

College diploma or University certificate below bachelor level
Bachelor's degree
University certificate above bachelor level
Medical degree
Master's degree
Doctoral degree

11. What was your total household income last year?
Less than $10 000
$10 000-$24 999
$25 000-$49 999
$50 000-$74 999
$75 000-$99 999
$100 000-$149 999
$150 000 or more
Prefer not to say

12. If you were living with your family when you were 18, what was your family's total income that year?
Less than $10 000
$10 000-$24 999
$25 000-$49 999
$50 000-$74 999
$75 000-$99 999
$100 000-$149 999
$150 000 or more
Prefer not to say
Not applicable

13a. What is your current employment status? (you may select more than one)
Employed full-time
Employed part-time
Work at home/self-employed
Homemaker
Caregiver (e.g., children, elderly)
Student, full time
Student, part time
Not employed for pay
Not working due to disability
Retired
Other (please specify) _______

13b. How would you best describe your current occupation? (e.g., sales, business owner, teacher, management, child care, health care, military, scientist, musician, etc.) ______________

14. How long have you been in a relationship with your current partner?
[If in a relationship with more than one person, please answer the questionnaire and this question with regard to your primary partner.]

If less than 2 years, give the number of months (between 3 and 23 months):
_____ months

If more than 2 years (i.e., 24 months or longer), give the number of years:
______ years

15a. How would you describe your current relationship?
I'm in a monogomous relationship _____
I'm an open relationship (i.e., I'm in a relationship(s) with more than one person) _____

15b. Are you currently living with your romantic partner?
Yes
No

If yes, how long have you been living together? _____________

15c. Are you currently married to your romantic partner?
Yes
No

**Minority Stress – Lesbian Internalized Homophobia Scale**

| | Disagree Strongly (1) | Disagree Moderately (2) | Disagree Slightly (3) | Undecided /Neutral (4) | Agree Slightly (5) | Agree Moderately (6) | Agree Strongly (7) |
|---|---|---|---|---|---|---|---|
| 1. I am not worried about anyone finding out that I am a LGBTQ+ person. | | | | | | | |
| 2. I do not feel the need to be on guard, lie, or hide my sexual orientation to others. | | | | | | | |
| 3. I try not to give signs that I am LGBTQ+. I am careful about the way I dress, the jewelry I wear, the places, people and events I talk about. | | | | | | | |
| 4. I wouldn't mind if my boss knew of my sexual orientation. | | | | | | | |
| 5. I live in fear that someone will find out I am a LGBTQ+ person. | | | | | | | |
| 6. I am comfortable being "out". I want others to know and see me as a LGBTQ+ person. | | | | | | | |
| 7. I feel comfortable talking about my sexual orientation in public. | | | | | | | |
| 8. If my peers knew of my sexual orientation, I am afraid that many would not want to be friends with me. | | | | | | | |
| 9. When speaking of my same-sex partner to a straight person, I often use neutral pronouns so the gender of the person is vague. | | | | | | | |
| 10. I act as if my same-sex romantic/intimate partners are merely friends. | | | | | | | |
| 11. When speaking of my same-sex partner to a straight person, I change pronouns so that others will think I'm involved with a man rather than a woman. | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12. I feel comfortable talking to my heterosexual friends about my everyday home life with my same-sex partner or my everyday activities with my LGBTQ+ friends. | | | | | | | |
| 13. It is important for me to conceal my sexual orientation from my family. | | | | | | | |
| 14. I feel comfortable discussing my sexual orientation with my family. | | | | | | | |
| 15. I could not confront a straight friend or acquaintance if they made a homophobic or heterosexist statement to me. | | | | | | | |
| 16. I am proud to be a part of the LGBTQ+ community. | | | | | | | |
| 17. Being a part of the LGBTQ+ community is important to me. | | | | | | | |
| 18. Having LGBTQ+ friends is important to me. | | | | | | | |
| 19. Attending LGBTQ+ events and organizations is important to me. | | | | | | | |
| 20. I feel comfortable joining a LGBTQ+ social group, sports team, or organization. | | | | | | | |
| 21. Social situations with other LGBTQ+ people make me feel uncomfortable. | | | | | | | |
| 22. I have respect and admiration for other LGBTQ+ women. | | | | | | | |
| 23. When interacting with members of the LGBTQ+ community, I often feel different and alone, like I don't fit in. | | | | | | | |
| 24. I frequently make negative comments about other LGBTQ+ women. | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25. I am familiar with LGBTQ+ movies and/or music. | | | | | | | |
| 26. I am familiar with LGBTQ+ books and/or magazines. | | | | | | | |
| 27. I am familiar with LGBTQ+ music festivals and conferences. | | | | | | | |
| 28. I am familiar with community resources for LGBTQ+ people (i.e., bookstores, support groups, bars, etc.). | | | | | | | |
| 29. I am aware of the history concerning the development of LGBTQ+ communities and/or the lesbian/gay rights movement. | | | | | | | |
| 30. I hate myself for being attracted to other women. | | | | | | | |
| 31. I feel bad for acting on my same-sex desires. | | | | | | | |
| 32. I believe female homosexuality is a sin. | | | | | | | |
| 33. If I could change my sexual orientation and become heterosexual, I would. | | | | | | | |
| 34. Being LGBTQ+ makes my future look bleak and hopeless. | | | | | | | |
| 35. I don't feel disappointment in myself for being LGBTQ+ . | | | | | | | |
| 36. If some LGBTQ+ women would change and be more acceptable to the larger society, as a group we would not have to deal with so much negativity and discrimination. | | | | | | | |
| 37. I wish some LGBTQ+ women wouldn't "flaunt" their sexual orientation. They only do it for shock value and it doesn't accomplish anything positive. | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 38. I can't stand LGBTQ+ women who are too "butch". They make LGTBQ+ women as a group look bad. | | | | | | | |
| 39. LGBTQ+ women are too aggressive. | | | | | | | |

Piggot, M. (2004). Double jeopardy: Lesbians and the legacy of multiple stigmatized identities. *Unpublished thesis, Psychology Strand at Swinburne University of Technology, Australia*.

**Minority Stress- Daily Heterosexist Experiences Questionnaire**

Reminder: You may withdraw from the study at any time and you may decline to answer any question(s) without having to explain your reasons for doing so and without consequences.

**How much has this problem distressed or bothered you during the past 12 months?**

| | Did not happen/Not applicable to me (0) | It happened, and it bothered me NOT AT ALL (1) | It happened, and it bothered me A LITTLE BIT (2) | It happened, and it bothered me MODERATELY (3) | It happened, and it bothered me QUITE A BIT (4) | It happened, and it bothered me EXTREMELY (5) |
|---|---|---|---|---|---|---|
| 1. Difficulty finding a partner because you are LGBTQ+. | | | | | | |
| 2. Difficulty finding LGBTQ+ friends. | | | | | | |
| 3. Having very few people you can talk to about being LGBTQ+. | | | | | | |
| 4. Watching what you say and do around heterosexual people. | | | | | | |
| 5. Hearing about LGBTQ+ people you know being treated unfairly. | | | | | | |
| 6. Hearing about LGBTQ+ people you don't know being treated unfairly. | | | | | | |
| 7. Hearing about hate crimes (vandalism, physical or sexual assault) that happened to LGBTQ+ people you don't know. | | | | | | |
| 8. Being called names such as "fag" or "dyke." | | | | | | |
| 9. Hearing other people being called names such as "fag" or "dyke." | | | | | | |
| 10. Hearing someone make jokes about LGBTQ+ people. | | | | | | |
| 11. Family members not accepting your partner as a part of the family. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 12. Your family avoiding talking about your LGBTQ+ identity. | | | | | | |
| 13. Your children being rejected by other children because you are LGBTQ+. | | | | | | |
| 14. Your children being verbally harassed because you are LGBTQ+. | | | | | | |
| 15. Feeling like you don't fit in with other LGBTQ+ people. | | | | | | |
| 16. Pretending that you have an opposite sex partner. | | | | | | |
| 17. Pretending that you are heterosexual. | | | | | | |
| 18. Hiding your relationship from other people. | | | | | | |
| 19. People staring at you when you are out in public because you are LGBTQ+. | | | | | | |
| 20. Feeling invisible in the LGBTQ+ community because of your gender expression. | | | | | | |
| 21. Being harassed in public because of your gender expression. | | | | | | |
| 22. Being harassed in bathrooms because of your gender expression. | | | | | | |
| 23. Being rejected by your mother for being LGBTQ+. | | | | | | |
| 24. Being rejected by your father for being LGBTQ+. | | | | | | |
| 25. Being rejected by a sibling or siblings because you are LGBTQ+. | | | | | | |
| 26. Being rejected by other relatives because you are LGBTQ+. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 27. Being verbally harassed by strangers because you are LGBTQ+. | | | | | | |
| 28. Being verbally harassed by people you know because you are LGBTQ+. | | | | | | |
| 29. Being treated unfairly in stores or restaurants because you are LGBTQ+. | | | | | | |
| 30. People laughing at you or making jokes at your expense because you are LGBTQ+. | | | | | | |
| 31. Hearing politicians say negative things about LGBTQ+ people. | | | | | | |
| 32. Avoiding talking about your current or past relationships when you are at work. | | | | | | |
| 33. Hiding part of your life from other people. | | | | | | |
| 34. Feeling like you don’t fit into the LGBTQ+ community because of your gender expression. | | | | | | |
| 35. Difficulty finding clothes that you are comfortable wearing because of your gender expression. | | | | | | |
| 36. Being misunderstood by people because of your gender expression. | | | | | | |
| 37. Being treated unfairly by teachers or administrators at your children’s school because you are LGBQ+. | | | | | | |
| 38. People assuming you are heterosexual because you have children. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 39. Being treated unfairly by parents of other children because you are LGBTQ+. | | | | | | |
| 40. Difficulty finding other LGBTQ+ families for you and your children to socialize with. | | | | | | |
| 41. Being punched, hit, kicked, or beaten because you are LGBTQ+. | | | | | | |
| 42. Being assaulted with a weapon because you are LGBTQ+. | | | | | | |
| 43. Being raped or sexually assaulted because you are LGBTQ+. | | | | | | |
| 44. Having objects thrown at you because you are LGBTQ+. | | | | | | |
| 45. Being sexually harassed because you are LGBTQ+. | | | | | | |

Balsam, K. F., Beadnell, B., & Molina, Y. (2013). The Daily Heterosexist Experiences Questionnaire: Measuring minority stress among lesbian, gay, bisexual, and transgender adults. *Measurement and Evaluation in Counseling and Development*, *46*(1), 3-25. https://doi.org/10.1177/0748175612449743

**Experiences in Close Relationships – Revised Questionnaire**

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.

| | Disagree Strongly (1) | Disagree Moderately (2) | Disagree Slightly (3) | Undecided /Neutral (4) | Agree Slightly (5) | Agree Moderately (6) | Agree Strongly (7) |
|---|---|---|---|---|---|---|---|
| 1. I'm afraid that I will lose my partner's love. | | | | | | | |
| 2. I often worry that my partner will not want to stay with me. | | | | | | | |
| 3. I often worry that my partner doesn't really love me. | | | | | | | |
| 4. I worry that romantic partners won't care about me as much as I care about them. | | | | | | | |
| 5. I often wish that my partner's feelings for me were as strong as my feelings for him or her. | | | | | | | |
| 6. I worry a lot about my relationships. | | | | | | | |
| 7. When my partner is out of sight, I worry that he or she might become interested in someone else. | | | | | | | |
| 8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me. | | | | | | | |
| 9. I rarely worry about my partner leaving me. | | | | | | | |
| 10. My romantic partner makes me doubt myself. | | | | | | | |
| 11. I do not often worry about being abandoned. | | | | | | | |
| 12. I find that my partner(s) don't want to get as close as I would like. | | | | | | | |
| 13. Sometimes romantic partners change their feelings | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| about me for no apparent reason. | | | | | | | |
| 14. My desire to be very close sometimes scares people away. | | | | | | | |
| 15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am. | | | | | | | |
| 16. It makes me mad that I don't get the affection and support I need from my partner. | | | | | | | |
| 17. I worry that I won't measure up to other people. | | | | | | | |
| 18. My partner only seems to notice me when I'm angry. | | | | | | | |
| 19. I prefer not to show a partner how I feel deep down. | | | | | | | |
| 20. I feel comfortable sharing my private thoughts and feelings with my partner | | | | | | | |
| 21. I find it difficult to allow myself to depend on romantic partners. | | | | | | | |
| 22. I am very comfortable being close to romantic partners. | | | | | | | |
| 23. I don't feel comfortable opening up to romantic partners. | | | | | | | |
| 24. I prefer not to be too close to romantic partners. | | | | | | | |
| 25. I get uncomfortable when a romantic partner wants to be very close. | | | | | | | |
| 26. I find it relatively easy to get close to my partner. | | | | | | | |
| 27. It's not difficult for me to get close to my partner. | | | | | | | |
| 28. I usually discuss my problems and concerns with my partner. | | | | | | | |
| 29. It helps to turn to my romantic partner in times of need. | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 30. I tell my partner just about everything. | | | | | | | |
| 31. I talk things over with my partner. | | | | | | | |
| 32. I am nervous when partners get too close to me. | | | | | | | |
| 33. I feel comfortable depending on romantic partners. | | | | | | | |
| 34. I find it easy to depend on romantic partners. | | | | | | | |
| 35. It's easy for me to be affectionate with my partner. | | | | | | | |
| 36. My partner really understands me and my needs. | | | | | | | |

Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the revised experiences in close relationships (ECR-R) self-report measure of adult romantic attachment. *Personality and Social Psychology Bulletin*, *31*(11), 1524-1536. https://doi.org/10.1177/0146167205276865

**The Revised Conflict Tactics Scale**

Reminder: You may withdraw from the study at any time and you may decline to answer any question(s) without having to explain your reasons for doing so and without consequences.

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please circle how many times you did each of these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, circle "7."

| | One time (1) | Twice (2) | 3-5 times (3) | 6-10 times (4) | 11-20 times(5) | More than 20 times(6) | Not in the past year, but has happened in the past (7) | Never (0) |
|---|---|---|---|---|---|---|---|---|
| I insulted or swore at my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I threw something at my partner that could hurt. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I twisted my partner's arm or hair. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I pushed or shoved my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I used a knife or gun on my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I called my partner fat or ugly. | | | | | | | | |
| My partner called me fat or ugly. | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I punched or hit my partner with something that could hurt. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I destroyed something belonging to my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I choked my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I shouted or yelled at my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I slammed my partner against a wall. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I beat up my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I grabbed my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I stomped out of the room or house or yard during a disagreement. | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| My partner did this to me. | | | | | | | | |
| I slapped my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I burned or scalded my partner on purpose. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I accused my partner of being a lousy lover. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I did something to spite my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I threatened to hit or throw something at my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I kicked my partner. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I threatened to tell my partner's employer, family, or others that she is LGBTQ+. | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| My partner did this to me. | | | | | | | | |
| I forced my partner to show physical or sexual affection in public, even though she didn't want to. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I used my partner's age, race, class, or religion against her. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I questioned whether my partner was a 'real' lesbian, gay, bisexual, or queer woman. | | | | | | | | |
| My partner did this to me. | | | | | | | | |
| I told my partner she deserves what she gets because she is a LGBTQ+ woman. | | | | | | | | |
| My partner did this to me. | | | | | | | | |

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, *17*(3), 283-316. Doi: 10.1177/019251396017003001

**With added LGBTQ+ items from**

Balsam, K. F., & Szymanski, D. M. (2005). Relationship quality and domestic violence in women's same-sex relationships: the role of minority stress. *Psychology of Women Quarterly*, *29*(3), 258-269. https://doi.org/10.1111/j.1471-6402.2005.00220.x

**Coercive Control Scale**

| | One time | Twice | 3-5 times | 6-10 times | 11-20 times | More than 20 times | Never | Not in the past year, but has happened in the past |
|---|---|---|---|---|---|---|---|---|
| My partner tried to keep me from seeing or talking to my family. | | | | | | | | |
| My partner tried to turn my family and friends against me. | | | | | | | | |
| My partner tried to keep me from doing things to help myself. | | | | | | | | |
| My partner interfered in my relationship with family members. | | | | | | | | |
| My partner threatened to have an affair with someone else. | | | | | | | | |
| My partner blamed me for causing his or her violent behaviour. | | | | | | | | |
| My partner tried to make me feel like I was crazy. | | | | | | | | |
| My partner blamed me when upset even if I had nothing to do with it. | | | | | | | | |
| My partner tried to convince my family and friends that I was crazy. | | | | | | | | |
| My partner blamed me for her problems. | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| My partner threatened to leave the relationship. | | | | | | | | |
| My partner did not want me to go to school or to other self-improvement activities. | | | | | | | | |
| My partner threatened to hurt herself if I left her. | | | | | | | | |

Kasian, M., & Painter, S. L. (1992). Frequency and severity of psychological abuse in a dating population. Journal of Interpersonal Violence, 7, 350-364. https://doi.org/10.1177/088626092007003005

**COVID-19 QUESTIONS**

1A) Since physical distancing measures began (as a result of COVID-19), have you noticed a change in how often the behaviours in the above questions happen when you and your partner have differences? (e.g., a change in how often either I or my partner insults, swears at, or pushes the other.)

Yes
No

1B) If yes, please describe:

2A) Do you believe physical distancing measures (e.g., public health advice to avoid close physical contact with anyone not living in your primary residence) have had an impact on your romantic relationship?

Yes
No

2B) If yes, please indicated how each of the following have changed in your relationship as a result of physical distancing measures.

| | Decreased | Stayed the same | Increased |
|---|---|---|---|
| General conflict in my relationship. | | | |
| Stress or conflict over money, jobs, working from home. | | | |
| Stress or conflict related to children in the home (e.g., caregiving, home schooling). | | | |
| Feelings of closeness to your partner. | | | |
| Overall stress levels (either yours or your partner's) contributing to stress or conflict in your relationship. | | | |
| Your or your partner's overall emotional health contributing to stress or conflict in your relationship. | | | |
| Your or your partner's overall physical health contributing to stress or conflict in your relationship. | | | |

2C) Please indicate whether each of the following have had an impact on your relationship.

| | No impact on my relationship | A small impact on my relationship | A big impact on my relationship |
|---|---|---|---|
| You or your partner's fears or worries about becoming ill. | | | |
| You or your partner caring for each other or family members who have or are suspected of having the COVID-19 virus. | | | |

| You or your partner having a suspected or confirmed case of the COVID-19 virus. | | | |
|---|---|---|---|

2D) Please indicate whether each of the following have decreased, stayed the same, or increased since the start of COVID-19.

| | Decreased | Stayed the same | Increased |
|---|---|---|---|
| Feeling anxious or nervous. | | | |
| Feeling sad, down, uninterested in life, or depressed. | | | |
| Feelings of loss or grief. | | | |
| Feelings of loneliness. | | | |

## Appendix C: Letter of Information for Implied Consent

**Consent Form**
**Minority Stress and Relationships Study (MTurk Collection Version)**

**Introduction:** You are invited to participate in a study entitled the *Minority Stress and Relationships Study,* which is being conducted by Dr. Marsha Runtz (Associate Professor in the Department of Psychology and Ms. Keara Rodd (Doctorate student in Clinical Psychology). You may contact **Ms. Rodd** at 250-472-4177 if you have any questions about this research. You may also contact **Dr. Marsha Runtz**, the principal investigator, at **250-721-7546** or runtz@uvic.ca.
**Purpose & Importance of the Study:** This research explores the same-sex relationships of LGBTQ+ identified women and factors that might increase the risk of violence and abusive behaviour in those relationships. In this study, the terms "violence and abuse" may include physical, verbal, psychological, or sexually aggressive behaviours between partners or from one partner to another within a romantic/intimate couple. We are interested in whether experiencing stress associated with discrimination based on sexual orientation influences the occurrence of violence and abuse in women's same-sex relationships. This study is important because there is a lack of research into the effects of discrimination on same-sex female couples in relation to relationship violence. Knowledge gained regarding how discrimination related to sexual orientation may impact relationship violence will provide guidance for the prevention and treatment of relationship violence and its effects and will contribute to efforts to address the larger issues of social inequities and discrimination experienced by LGBTQ+ individuals.
**Voluntary Participation:** Your participation in this research must be completely voluntary. **You may withdraw from the study at any time and you may refuse to answer any question(s) without having to explain your reasons for doing so and without consequences. If you change your mind about having your responses used in this research or do not want to answer any further questions, please indicate this by scrolling to the end of the survey without completing any further questions where you will select "I do not wish to submit this survey." The data you provided will be discarded and you will be forwarded to the final page where you will still be able to receive compensation.** HOWEVER, IF YOU DO SUBMIT YOUR DATA AND THEN WANT TO REMOVE IT, IT WILL BE LOGISTICALLY IMPOSSIBLE FOR US TO REMOVE YOUR DATA.
**Anonymity:** All of the responses that you give in this study are completely anonymous and confidential; your name will not be linked to your responses in any way. Your answers will be kept in an anonymized data file without the possibility of identifying you. All of the information collected will be used for group-based analyses; that is, responses will **not** be analyzed individually but will be pooled together with a large number of responses from other participants. Please do **not** write in or submit your name in any place on the questionnaire and please do **not** provide the names of any other individuals that may have been involved in any of the events you disclose in this questionnaire. We are limiting participation in this study to individuals who identify as women, who are 19 years of age and older, and who are currently in a same-sex relationship of at least three months duration. **If, however, we receive *identifying* information that leads us to believe that you or any individual who is under 19 years of age is at risk of harm, we would be obliged to inform the proper authorities.**
**Confidentiality:** The confidentiality of your data will be further protected by keeping your responses and all data files and other research records secure (e.g., in password protected files and

computers in locked offices). Only the researcher and research assistants will have access to the data. Computerized anonymous data files will be kept for up to 10 years beyond the date of the last publication of the findings from this study. *Please be advised that this research study includes data storage in U.S.A. As such, there is a possibility that information about you that is gathered for this research study may be accessed without your knowledge or consent by the U.S. government, in compliance with the U.S. Freedom Act.*

**Sensitive Topics:** If you decide to participate in this study, you will be asked to complete an online questionnaire that inquires about a range of psychological and social issues that include some personal or sensitive topics such as difficult life experiences including discrimination based on gender identity and sexual orientation, ability to trust romantic partners, experiences of relationship violence, and general demographic information.

**Eligibility:** You are eligible to participate in this study if you are 19 years of age or older and identify as a woman in a same-sex relationship of 3 months duration or longer.

**Inconvenience & Risks:** Participation in this study may cause some inconveniences to you, including the time it will take to complete the questionnaire (approximately 30 mins). A potential risk of participating in this research is that some people may feel some emotional discomfort as a result of answering questions of a sensitive nature (e.g., about discrimination). To deal with these risks, we want you to know that you don't have to answer any questions that make you feel uncomfortable, that you can withdraw your participation at any time, and that you can contact the researcher (Dr. Runtz) or research assistant (Ms. Rodd) about any concerns you might have that have arisen as a result of participating in this research. In addition, phone numbers for support resources will be provided at the end of the study, should these services be of interest to you.

**Benefits:** In addition to compensation provided by the website Figure Eight, the potential benefits of your participation include: 1) experiencing psychological research methods first hand, and 2) helping us to understand how life experiences (including discrimination) might affect the relationships and psychological health and well-being of women who identify as LGBTQ+.

**Compensation:** To compensate you for your participation, you will be paid a rate of $3.60 per survey through Figure Eight. It is important for you to know that it is unethical to provide undue compensation to research participants, and if you agree to participate in this study, this form of compensation should not be the sole reason for your participation. If you would not participate if this compensation were not offered, then you should decline.

**Results from the Study:** After you have completed the study, you will receive a debriefing form that outlines the basic purpose of the research in more detail. If you would like a summary of the findings after the study is completed, you can contact Dr. Runtz or Ms. Rodd directly, or check this website (http://web.uvic.ca/~runtzweb/ ) for summaries of papers prepared from this and related projects. It is anticipated that overall findings from this study will be shared with others in the following ways: in presentations to other graduate students and faculty, in conference presentations, on the above website, and in published articles.

**Ethical Approval:** In addition to being able to contact the researchers, you may verify the ethical approval of this study, or raise any concerns you might have by contacting the Human Research Ethics Board at the University of Victoria at (250) 472-4545 or ethics@uvic.ca .

**Attention:** When completing this survey, please make sure that you are **alone** and undisturbed, and in a place where you feel **comfortable** to answer personal questions.

**If any of the questions in this study make you uncomfortable in any way, or if participating in this study brings up any concerns that are distressing for you, some resources that might be of assistance are provided below:**

- Resources for Partner Violence in Canada: http://endingviolencecanada.org/getting-help/
- United States National Domestic Violence Hotline: https://www.thehotline.org (1-800-799-7233)
- Canadian Association for Suicide Prevention (links to local crisis centres): http://www.suicideprevention.ca/in-crisis-now/find-a-crisis-centre-now/
- National Suicide Prevention Hotline (US): https://suicidepreventionlifeline.org/ **1-800-273-TALK (8255)**
- Online peer support for LBGT individuals: https://support.therapytribe.com/lgbt-support-group/
- **PFLAG Canada**: Support, education and resources for parents, families, friends and allies to queer and trans communities http://pflagcanada.ca/
- **PFLAG USA**: https://www.pflag.org/
- CRHSP (Canadian Register of Health Service Psychologists): http://www.findapsychologist.ca/wp-content/themes/crhspp/index_search.php
- To find a Psychologist in Canada or the US: http://locator.apa.org
- Betterhelp (online private counseling): https://www.betterhelp.com/
- Psychology Today (find a therapist): https://therapists.psychologytoday.com/rms
- GoodTherapy.org: http://www.goodtherapy.org/

**To print a copy of this form, please use CTRL + P or follow the usual methods for printing from your web browser.**

**Consent Form**
**Minority Stress and Relationships Study (Version for other online collection: e.g., Reddit, Facebook, etc.)**

**Introduction:** You are invited to participate in a study entitled the *Minority Stress and Relationships Study,* which is being conducted by Dr. Marsha Runtz (Associate Professor in the Department of Psychology and Ms. Keara Rodd (Doctorate student in Clinical Psychology). You may contact **Ms. Rodd** at 250-472-4177 if you have any questions about this research. You may also contact **Dr. Marsha Runtz**, the principal investigator, at **250-721-7546** or runtz@uvic.ca.
**Purpose & Importance of the Study:**
This research explores the same-sex relationships of LGBTQ+ identified women and factors that might increase the risk of violence and abusive behaviour in those relationships. In this study, the terms "violence and abuse" may include physical, verbal, psychological, or sexually aggressive behaviours between partners or from one partner to another within a romantic/intimate couple. We are interested in whether experiencing stress associated with discrimination based on sexual orientation influences the occurrence of violence and abuse in women's same-sex relationships. This study is important because there is a lack of research into the effects of discrimination on same-sex female couples in relation to relationship violence. Knowledge gained regarding how discrimination related to sexual orientation may impact relationship violence will provide guidance for the prevention and treatment of relationship violence and its effects and will contribute to efforts to address the larger issues of social inequities and discrimination experienced by LGBTQ+ individuals.
**Voluntary Participation:** Your participation in this research must be completely voluntary. **You may withdraw from the study at any time and you may refuse to answer any question(s) without having to explain your reasons for doing so and without consequences. If you change your mind about having your responses used in this research or do not want to answer any further questions, please indicate this by scrolling to the end of the survey without completing any further questions where you will select "I do not wish to submit this survey." The data you provided will be discarded and you will be forwarded to the final page where you will still be able to receive compensation.** HOWEVER, IF YOU DO SUBMIT YOUR DATA AND THEN WANT TO REMOVE IT, IT WILL BE LOGISTICALLY IMPOSSIBLE FOR US TO REMOVE YOUR DATA.
**Anonymity:** All of the responses that you give in this study are completely anonymous and confidential; your name will not be linked to your responses in any way. If you choose to submit your email address to be entered into the prize draw, your email will **not** be attached to any of your confidential and anonymous answers. Your answers will be kept in an anonymized data file without the possibility of identifying you. All of the information collected will be used for group-based analyses; that is, responses will **not** be analyzed individually but will be pooled together with a large number of responses from other participants. Please do **not** write in or submit your name in any place on the questionnaire and please do **not** provide the names of any other individuals that may have been involved in any of the events you disclose in this questionnaire. We are limiting participation in this study to individuals who identify as women, who are 19 years of age and older, and who are currently in a same-sex relationship of at least three months duration. **If, however, we receive *identifying* information that leads us to believe that you or any individual who is under 19 years of age is at risk of harm, we would be obliged to inform the proper authorities.**

**Confidentiality:** The confidentiality of your data will be further protected by keeping your responses and all data files and other research records secure (e.g., in password protected files and computers in locked offices). Only the researcher and research assistants will have access to the data). Computerized anonymous data files will be kept for up to 10 years beyond the date of the last publication of the findings from this study. *Please be advised that this research study includes data storage in U.S.A. As such, there is a possibility that information about you that is gathered for this research study may be accessed without your knowledge or consent by the U.S. government, in compliance with the U.S. Freedom Act.*
**Sensitive Topics:** If you decide to participate in this study, you will be asked to complete an online questionnaire that enquires about a range of psychological and social issues that include some personal or sensitive topics such as difficult life experiences including discrimination based on gender identity and sexual orientation, ability to trust romantic partners, experiences of relationship violence, and general demographic information.
**Eligibility:** You are eligible to participate in this study if you are 19 years of age or older and identify as a woman in a same-sex relationship of 3 months duration or longer.
**Inconvenience & Risks:** Participation in this study may cause some inconveniences to you, including the time it will take to complete the questionnaire (approximately 30 mins). A potential risk of participating in this research is that some people may feel some emotional discomfort as a result of answering questions of a sensitive nature (e.g., about discrimination). To deal with these risks, we want you to know that you don't have to answer any questions that make you feel uncomfortable, that you can withdraw your participation at any time, and that you can contact the researcher (Dr. Runtz) or research assistant (Ms. Rodd) about any concerns you might have that have arisen as a result of participating in this research. In addition, phone numbers for support resources will be provided at the end of the study, should these services be of interest to you.
**Benefits:** In addition to the options to enter a lottery to receive a $10, $15, or $20 gift card to Amazon or to have the researchers donate 5$ to charity, the potential benefits of your participation include: 1) experiencing psychological research methods first hand; and 2) helping us to understand how life experiences (including discrimination) might affect the relationships and psychological health and well-being of women who identify as LGBTQ+.
**Compensation:** In compensation for your participation, you have the options to enter a lottery to receive a $10, $15, or $20 gift card to Amazon or to have the researchers donate 5$ to the International Lesbian, Gay, Bisexual, Trans, and Intersex Association (ILGA). It is important for you to know that it is unethical to provide undue compensation to research participants, and if you agree to participate in this study, this form of compensation should not be coercive. If you would **not** participate if this compensation were not offered, then you should decline.
**Results from the Study:** After you have completed the study, you will receive a debriefing form that outlines the basic purpose of the research in more detail. If you would like a summary of the findings after the study is completed, you can contact Dr. Runtz or Ms. Rodd directly, or check this website (http://web.uvic.ca/~runtzweb/ ) for summaries of papers prepared from this and related projects. It is anticipated that overall findings from this study will be shared with others in the following ways: in presentations to other graduate students and faculty, in conference presentations, on the above website, and in published articles.
**Ethical Approval:** In addition to being able to contact the researchers, you may verify the ethical approval of this study, or raise any concerns you might have by contacting the Human Research Ethics Board at the University of Victoria at (250) 472-4545 or ethics@uvic.ca .

**Attention:** When completing this survey, please make sure that you are **alone** and undisturbed, and in a place where you feel **comfortable** to answer personal questions.

**If any of the questions in this study make you uncomfortable in any way, or if participating in this study brings up any concerns that are distressing for you, some resources that might be of assistance are provided below:**

- Resources for Partner Violence in Canada: http://endingviolencecanada.org/getting-help/
- United States National Domestic Violence Hotline: https://www.thehotline.org (1-800-799-7233)
- Canadian Association for Suicide Prevention (links to local crisis centres): http://www.suicideprevention.ca/in-crisis-now/find-a-crisis-centre-now/
- National Suicide Prevention Hotline (US): https://suicidepreventionlifeline.org/ **1-800-273-TALK (8255)**
- Online peer support for LBGT individuals: https://support.therapytribe.com/lgbt-support-group/
- **PFLAG Canada**: Support, education and resources for parents, families, friends and allies to queer and trans communities http://pflagcanada.ca/
- **PFLAG USA**: https://www.pflag.org/
- CRHSP (Canadian Register of Health Service Psychologists): http://www.findapsychologist.ca/wp-content/themes/crhspp/index_search.php
- To find a Psychologist in Canada or the US: http://locator.apa.org
- Betterhelp (online private counseling): https://www.betterhelp.com/
- Psychology Today (find a therapist): https://therapists.psychologytoday.com/rms
- GoodTherapy.org: http://www.goodtherapy.org/

**To print a copy of this form, please use CTRL + P or follow the usual methods for printing from your web browser.**

## Appendix D: Debriefing Form
## Purpose of the Minority Stress and Relationships Study

Thank you for your interest and your participation in this study. Your responses are greatly appreciated because we realize that many of these questions were personal and perhaps not easy to answer. Please be assured that your responses will remain anonymous and confidential. We invite you to pass along the survey link (https://www.surveymonkey.ca/r/MSRuvicstudy) to anyone you believe could be interested in participating in this research and who meets the criteria for the survey (e.g., lives in Canada or the United States, identifies as a woman in a same-sex relationship of at least three months, and speaks English)

As mentioned in the informed consent letter that you accepted, one of the main purposes of this research is to gain a better understanding of the potential influence of minority stress (e.g., the chronic stress sometimes experienced by individuals with minority identities, e.g., LGBTQ+) on the relationships of women who identify as LGBTQ+. Specifically, we are interested in understanding how different forms of minority stress may be associated with relationship violence among women in same sex relationships. The different types of minority stress we are looking at include: overt discrimination (e.g., harassment, assault, homophobic language, etc.), internalized homophobia (e.g., believing societies notion that LGBTQ+ are less than heterosexual individuals in some way), expectations of rejection (e.g., expecting that something bad will happen as a result of identifying as LGBTQ+), vicarious trauma (e.g., hearing about discrimination against other LGBTQ+ people), and stress associated with how "out" one is (e.g., deciding who, when, and how to come out or not come out to others). Our research will explore whether, given these common challenging experiences, some LGBTQ+ women may struggle to feel comfortable in fully trusting their connection with their intimate partners. For example, if someone has been rejected by a family member or experienced harm from others because of their sexual orientation, this may make it harder to trust and bond with a romantic partner (this is also referred to as “attachment”). We are interested in learning whether these challenges related to trusting and being vulnerable with one’s partner, which understandably may be shaped by the discrimination experienced, may contribute to stress in the relationship as well as the occurrence of relationship violence.

We hope that our research will underscore the need for greater efforts to address and prevent, on a societal level, the occurrence of discrimination and micro-aggressions based on sexual orientation and gender identity. Our findings may also be useful to psychologists and other health-care professionals who work to assist members of minority groups to cope with these unfair and challenging situations, thereby supporting such individuals to thrive despite such challenges. Additionally, we expect that our research will also benefit professionals working with LGBTQ+ individuals and couples who might be experiencing or at risk for violence in their relationships by highlighting the potential role of discrimination in relation to relationship violence. Possible implications of this research also include understanding the importance of strong bonds in romantic relationships that may help to prevent or decrease the risk of relationship violence in same-sex couples despite experiences of discrimination. Other research has shown that the ability to trust one’s partner and to experience secure attachment may reduce the risk for violence in a relationship, and we believe this may be true for women in same-sex relationships as well.

We appreciate your participation in this study and hope that it has been a valuable and informative experience for you.

If you have any questions about this study, please contact Ms. Keara Rodd (at 250-472-4177 or krodd@uvic.ca ) or Dr. Marsha Runtz (at 250-721-7546 or runtz@uvic.ca). We will be happy to respond to any questions that you may have about this research. You may also contact the Human Research Ethics Board at the University of Victoria (250-472-4545 or ethics@uvic.ca) if you have any questions or concerns about this study.

**Thank you for participating in this study. If any of the questions in this study made you uncomfortable in any way, or if participating in this study brought up any issues that are distressing for you, some resources that might be of assistance are provided below:**

- Resources for Partner Violence in Canada: http://endingviolencecanada.org/getting-help/
- United States National Domestic Violence Hotline: https://www.thehotline.org (1-800-799-7233)
- Canadian Association for Suicide Prevention (links to local crisis centres): http://www.suicideprevention.ca/in-crisis-now/find-a-crisis-centre-now/
- National Suicide Prevention Hotline (US): https://suicidepreventionlifeline.org/ **1-800-273-TALK (8255)**
- Online peer support for LBGT individuals: https://support.therapytribe.com/lgbt-support-group/
- **PFLAG Canada**: Support, education and resources for parents, families, friends and allies to queer and trans communities http://pflagcanada.ca/
- **PFLAG USA**: https://www.pflag.org/
- CRHSP (Canadian Register of Health Service Psychologists): http://www.findapsychologist.ca/wp-content/themes/crhspp/index_search.php
- To find a Psychologist in Canada or the US: http://locator.apa.org
- Betterhelp (online private counseling): https://www.betterhelp.com/
- Psychology Today (find a therapist): https://therapists.psychologytoday.com/rms
- GoodTherapy.org: http://www.goodtherapy.org/