

The Effect of Race, Provocation, and Sex Role Ideology on
Attributions of Female Perpetrated IPV

by

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Abstract

Few studies have jointly examined the effects of perpetrator/victim race and provocation on observer perceptions of intimate partner violence (IPV), especially in the context of female perpetration. In the current study, 511 undergraduate students from a Canadian university were randomly assigned to one of eight vignette conditions wherein the race of the perpetrator (Black, White), victim (Black, White), and verbal victim provocation (present, absent) were varied in a scenario of female perpetrated IPV. A mixed-methods design was used to assess observer perceptions of incident seriousness and attributions of blame. Victim provocation was the most significant predictor across all perception models, accounting for 31% of the explained variance in the model of victim blame. Moreover, some observer effects were reduced to non-significance once a measure of racial bias was introduced as a control variable. Overall findings highlight the need for resources concerning IPV identification and other outreach services on university campuses.

Keywords: intimate partner violence, race, provocation, victim blame

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Chapter 1: Introduction

“Tell the world, Johnny, tell them ‘I, Johnny Depp, a man, I’m a victim, too, of domestic violence [...]’ And see how many people believe or side with you.” Those are the words of Amber Heard to Johnny Depp, presented at the 2022 defamation trial (John C. Depp, II v. Amber Laura Heard; CL-2019-2911). Heard’s sentiment is not unusual. It highlights the commonly held view of intimate partner violence (IPV) – men are sole perpetrators and women victims. Such attitudes have been echoed in empirical research, with individuals asserting that female-to-male IPV is humorous and thus denying the possibility (Scarduzio et al., 2017). If this perception prevails, male victims of IPV may be reluctant to disclose their victimization or engage in help-seeking behaviours (Carlyle et al., 2008).

Increased incidents of IPV have been reported in Canada since the beginning of the coronavirus (COVID-19) pandemic (Allen & Jaffray, 2020). With both men and women aged 15–24 at highest risk for IPV victimization (Survey of Safety in Public and Private Spaces, 2018), perception research among undergraduate samples is critical. Historically, research has focused almost exclusively on male perpetrated IPV in heterosexual relationships; however, less is known about female perpetration in similar contexts. Gaining a better understanding of observer perceptions of female perpetrated IPV is imperative. Public opinion can act as a driving force for the development and availability of victim resources, public policy development, and other legal outcomes. As such, the main purpose of the current study was to assess how undergraduate students’ own ideological beliefs (i.e., sex roles, race biases, sex by race biases) influenced their perceptions of seriousness and attributions of blame in a scenario of female perpetrated IPV.

It need be noted that term “victim”, rather than “survivor”, will be used throughout. Victim terminology is used in legal and criminal justice contexts, whereas “survivor” may be used in the community as a term of empowerment. Using the term “victim” in the current study is in no way meant to imply weakness or assign blame; it is simply used to convey that a potential criminal act has been perpetrated against this person. Though there is necessity for both terms, it is acknowledged that a person may identify as a survivor of IPV and not a victim.

1.1 IPV

The term IPV encompasses a wide range of relationship violence, including physical, sexual, and psychological violence (Royal Canadian Mounted Police, 2019). Official sources (e.g., police-reported data) often report that women are victimized by IPV at far greater rates than they offend. Though, in Canada and elsewhere, many large-scale victimization surveys have shown equal or greater rates of IPV perpetrated by women (Breiding et al., 2014; Brennan, 2011; Cotter & Savage, 2019; Felson & Cares, 2005; Fiebert, 2004; Straus, 2006; Williams & Frieze, 2005). Discrepancies between official data and self-report surveys are expected as most incidents of IPV are not reported to police, particularly those involving male victims (Conroy, 2021).

As women are more likely to be seriously injured from IPV than men, incidents of male-to-female IPV may come to police attention more often (Burczycka, 2016). For instance, female homicide victims in Canada are more likely to be killed at the hands of an intimate partner than any other perpetrator (Roy & Marcellus, 2019). Moreover, men may be reluctant to report their victimization to police as there is a risk of being viewed as a perpetrator (Dutton, 2012), or because it is less likely to result in an arrest or further action compared to when a female reports IPV victimization (Dutton, 2012; Simmons et al., 2005; Thornton et al., 2015). Male victims also

tend to downplay the seriousness of such incidents due to stigma and may therefore be less inclined than female victims to report their victimization to police (Eckstein, 2009, 2010).

Limitations of these statistics should also be noted. Rates of IPV victimization and perpetration observed in both police-reported data and victimization surveys omit the group with the highest prevalence rate – criminalized women. Criminalized women consistently report greater victimization rates, including IPV, compared to incarcerated men (Lynch et al., 2012) and community samples (Grella et al., 2013). Moreover, many women convicted of violent offences include those against their intimate partner; though, the true prevalence of female perpetrated IPV among these women remains unknown to the public because statistics given about convictions and incarcerations often record an omnibus category of violent offences.

Regardless of data collection method, it is well established that women can and do engage in IPV. Given that women's use of violence is relational in nature, wherein victims are personally known to them, as well as reactional (e.g., in response to provocation) rather than instrumental (e.g., cold, callous) (Brzozowski et al., 2018), it follows that women are more likely to perpetrate relationship-specific violence than any other type (Bouffard & Zedaker, 2016). This notion has also been reflected in police-reported data; among violent cases concerning a single victim and female perpetrator, women most often perpetrated violence against an intimate partner (36% in 2017; Savage, 2017). Nevertheless, female perpetrated IPV is still viewed by many as abnormal, perhaps in part due to media portrayals of female perpetrators.

1.2 Media Portrayal of Female IPV

Communication scholars have consistently demonstrated that news media plays a large role in determining public perceptions (e.g., Chapman et al., 2013; Wanta et al., 2004). In particular, the way media portrays female perpetrators of IPV may contribute to how scholars

and lay people view the urgency and importance of this issue. Although female use of violence is considered rare compared to their male counterparts (Cotter, 2021), media outlets often sensationalize such incidents when they do occur.

One of the most sensationalized cases of female perpetrated IPV in recent years was of Jodi Arias. The 2008 murder of Travis Alexander by then ex-girlfriend Jodi Arias gained widespread attention throughout the United States. Alexander and Arias had remained amicable after their breakup, though friends of Alexander had previously warned him of Arias' controlling nature and suspected stalking behaviours. On June 4th, 2008, Alexander had invited Arias to his home where the subsequent attack happened, sustaining approximately 30 knife wounds and a gunshot to the head. As news media were fascinated with the salacious details of the crime, Arias quickly rose to infamy. *After Dark: The Jodi Arias Trial* was televised daily wherein audiences viewed court evidence photos and graded the day's arguments (McLaughlin, 2013). While public interest increased, discussions soon focused on Arias' physical appearance, with some discounting the possibility of her committing the crime as a result. Others searched for external attributions to explain the nature and motive of the crime, such as jealousy of Alexander's new relationship. As such, debate about the role media plays in guiding public perceptions of female perpetrated IPV was invigorated. Despite being found guilty of first-degree murder, Arias remains a polarizing public figure with many admirers, as well as detractors, around the globe.

While the above incident does not represent an average IPV altercation, it demonstrates how media focus on extreme cases may propel such narratives as a reference point for the public. That is, such media portrayals may influence the public to believe that female perpetrators of IPV are different from "everyday" people, which in turn may lead individuals to search for external attributions and explanations to justify the perpetrator's behaviour (Sotirovic, 2003).

Having such a reference point may also cause male victims to minimize their own IPV experiences. Consequently, male victims may be reluctant to disclose their victimization or engage in help-seeking behaviours (Carlyle et al., 2008), which further reinforces the public perception that men are abnormal victims of IPV. Subsequent resources or research efforts dedicated to female perpetrators and male victims may be redirected.

1.3 Methodological Approaches to Assess Perceptions of IPV

Observer perceptions of IPV have predominantly been studied in the context of married or cohabitating adult partners across various contexts (e.g., Esqueda & Harrison, 2005; Locke & Richman, 1999; Willis et al., 1996); though examination of perceptions in young adult relationships has increased in recent years (e.g., Hamby & Jackson, 2010; Hutchinson, 2012; Owarish-Gross, 2012). While real-world IPV research is often conducted among victims and perpetrators, exploring their motivations and reasons for using IPV (e.g., Babcock et al., 2003), experimental designs are often implemented to assess observer perceptions. Such designs typically use police report transcripts, mock jury trials, or vignettes portraying real or hypothetical incidents of IPV. Perception outcomes are usually assessed across Likert ratings of incident seriousness as well as perpetrator/victim blame and responsibility.

IPV perception research has primarily focused on sex differences of the IPV dyad, as well as different types of IPV situations (e.g., psychological, sexual). These vignette-based studies often employ fully crossed factorial designs that vary perpetrator and victim sex; herein, vignettes or trial transcripts typically use identical materials across conditions (aside from altering sexes of perpetrator/victim). For example, researchers commonly utilize 3-way (participant sex * perpetrator sex * victim sex) between-subjects multivariate analysis of variances (MANOVA) to examine observer perceptions of seriousness and responsibility in

heterosexual and homosexual relationships (e.g., Hamby & Jackson, 2010; Sylaska & Walters, 2014). Other researchers opt to manipulate the incident itself (e.g., physical, sexual, verbal, with or without victim provocation), providing different materials to participants while perpetrator/victim sex is held constant (e.g., Rubenstein, 2016). In such designs, some researchers have chosen to use ordinary least squares (OLS) regression analyses, conducting separate models for each type of IPV incident (e.g., Rubenstein, 2016). Both types of experimental designs also often include self-report measures of factors previously found to influence observer perceptions, such as endorsement of sex role ideology (e.g., Esqueda & Harrison, 2005).

Due to the heavy focus on sex differences of perpetrator/victim, most studies have failed to consider the impact of perpetrator/victim race on perceptions of incident seriousness, blame, and responsibility, especially as it concerns female perpetration. Of the few observer perception studies which manipulate perpetrator/victim race, the majority depict male-to-female IPV. For instance, Rubenstein (2016) implemented a racial dyad (White, Black) across three types of IPV vignettes (i.e., physical, verbal, sexual), assessing perceptions of seriousness, victim culpability, offender culpability, and law violations. While this study provides valuable information pertaining to the effects of perpetrator/victim race across different types of IPV, it remains unknown if results would be similar in the context of female perpetration. Moreover, the joint influence of perpetrator/victim race (White, Black) and victim alcohol consumption has been explored on perceptions of victim blaming (Harrison & Esqueda, 2000); though, again, results are restricted to the context of male-to-female IPV. At the time of writing, no IPV observer perception studies which examined the effects of perpetrator/victim race in the context of female perpetration were identified.

1.4 Variables Influencing Observer Perceptions of IPV

The literature has shown that perceptions of IPV impact how others view IPV victims (e.g., victim blaming), as well as how victims view themselves (e.g., blaming themselves; see Flood & Pease, 2009). Numerous factors have been found to influence an observer's perceptions of IPV, including their own beliefs and biases (i.e., racial stereotypes, sex-based stereotypes, sex role ideology, just world ideology), as well as personal characteristics (i.e., personal history of IPV victimization/perpetration, childhood abuse history). Gaining a better understanding of observer perceptions is imperative as public opinion can act as a powerful force for the development and availability of victim resources, public policy development, and other legal outcomes.

Effect of Perpetrator/Victim Race and Racial Stereotypes

A large body of jury decision-making research has explored the effects of defendant race on decisions of guilt. Meta-analytic findings consistently demonstrated small but significant effects of defendant race on guilt decisions across various criminal contexts, wherein participants were more likely to report a guilty verdict if the defendant was of a different race, compared to if the defendant was the same race of the participant (Devine & Caughlin, 2014; Mitchell et al., 2005). Relatively less research has been conducted on the effects of perpetrator/victim race in the context of IPV observer perceptions. Among these studies, Black-White variations of perpetrator/victim race are commonly used; significant effects of perpetrator/victim race are then typically discussed in light of racial stereotypes.

Stereotypes involve the interpretation of another's behaviour and personality, with that perception then applied to groups (see Quinn et al., 2007). Historically, negative stereotyping of Black Americans has been particularly salient. For instance, Black American males are often

ascribed aggressive, violent, and angry characteristics (Powell, 2008), whereas Black American women have similarly been stereotyped as loud, aggressive, and antagonistic (Niemann et al., 1994). Negative stereotyping of Black American males as dangerous or criminal are also prominent (e.g., Dixon & Maddox, 2005) and may subsequently influence observer perceptions of IPV, especially when experimental materials depict involvement with police or the criminal justice system.

In a key study, Locke and Richman (1999) used a racial dyad (Black, White) to assess perceptions of IPV among American college students. A mock police report outlined that the husband had physically assaulted the wife (i.e., pushing to ground, repeated face punching). Results indicated that vignettes with a White husband were attributed more blame than those with a Black husband, regardless of the wife's race. The researchers proposed that participants may have used the aggressive racial stereotype to justify the Black husband's use of violence, and thus less blame was attributed to him because his use of violence was less surprising. Moreover, it can be posited that negative racial stereotypes concerning criminality were dually activated, as a mock police transcript was used. Similar results have been reported in more recent publications, finding that vignettes depicting a Black offender/Black victim and Black offender/White victim were predictive of lower seriousness ratings as compared to White offender/White victim in vignettes of physical male-to-female IPV (Rubenstein, 2016). In a similar fashion, participants may have rated scenarios with a Black offender as less serious, regardless of the victim's race, because stereotypical aggressive characteristics had already been ascribed to him.

This pattern has also been observed in the context of female-to-male IPV. A recent mock jury study wherein a woman (Black or White) was on trial for murdering her husband found that

the White wife was rated more harshly than the Black wife (Mossiere et al., 2018). The researchers suggested that these results may be attributed to income disparities and other racial inequalities observed in the United States. Specifically, that mock jurors may have endorsed beliefs that the Black wife did not have as many financial resources or outreach opportunities available, relative to her White counterpart, therefore the murder perpetrated by the Black wife was more justifiable as a last resort act of self-defense to escape victimization. Though, it can similarly be argued that such rationale may stem from negative stereotyping of Black American women as aggressive. Specifically, that the Black woman's use of fatal violence was viewed as more acceptable than the White woman's, because of the innate aggressive stereotype ascribed to her. This is further supported by participant reports that the White wife was perceived as more cognizant of her actions as compared to the Black wife.

It need be noted that some racial stereotypes may be more prominent or widespread depending on location. Racial stereotyping of Black Americans may not translate to Black Canadians due to the differences in the cultural makeup or social norms between countries. In turn, it is possible that significant effects of perpetrator/victim race (i.e., Black, White) observed in American studies may not similarly occur when Canadian samples are used. To illustrate, a Canadian mock jury study concerning sexual assault found that the harshest recommended sentences were given to Indigenous-Canadian defendants, as compared to Black or White Canadian defendants (Maeder et al., 2015). Although this is only one example, it suggests that effects of race and/or racial stereotypes may function differently depending on where the study was conducted.

Altogether, exploring how racial stereotypes operate in this context is imperative to understanding IPV because any such stereotype activation, whether it be conscious or not, will

guide the subsequent attitudes and perceptions of the IPV incident (Harrison & Esqueda, 2000; Rubenstein, 2016). Studies reporting significant effects of perpetrator and/or victim race (Black, White) on observer perceptions have predominantly been observed among American samples in which IPV scenarios involved high situational intensity, including rape (George & Martinez, 2002), greater physical assault (i.e., pushing to ground, repeated face punching; Locke & Richman, 1999), where police were called to the scene (Esqueda & Harrison, 2005), a murder occurred as a result (Mossiere et al., 2018), or the physical assault was serious enough to be tried in court (Willis et al., 1996). It can thus be posited that the heightened situational intensity may have increased the likelihood that negative racial stereotypes concerning Black Americans were activated when observers gave their ratings. More research is needed to see if and how racial stereotypes operate in a Canadian context, especially in varying situational intensities.

Effect of Perpetrator/Victim Sex and Sex-Based Stereotypes

As seen in the real-world case of Jodi Arias, there is a tendency for individuals to search for external attributions to explain women's violent behaviour, as it is commonly viewed as abnormal in comparison to male violence (e.g., Scarduzio et al., 2017). Sex-based stereotypes may especially emphasize the differences observed between perceptions of male and female perpetrated IPV. In the context of IPV research, sex-based stereotypes pertaining to physical capability and likelihood of perpetrating injury have been shown to be influential. For instance, after reading vignettes of female perpetrated IPV, one study found that participants reported feelings of shock and surprise, as well as asserting that a woman physically overpowering a man was humorous and thus denying the possibility (Scarduzio et al., 2017).

Findings from a large-scale community-based study may also be attributed to sex-based stereotypes concerning injury perpetration. Taylor and Sorenson (2005) found that, despite

general consensus among the sample that the act of a woman slapping a man should be illegal, participants still did not recommend any legal intervention (e.g., calling police) when presented with the same hypothetical situation. However, participants view of a man slapping a woman was remarkably different; recommendation of legal intervention was far more likely. Aligning with past findings, it can be argued that participants did not believe a woman's slap was capable of seriously injuring a man, compared to a man slapping a woman, and thus legal intervention was not seen as necessary. It can therefore be concluded that although the physical consequences of IPV do not determine incident culpability, observers often perceive it as such in legal contexts.

In sum, a large body of research supports differences in IPV perceptions as a function of perpetrator/victim sex; such differences may be emphasized by observer endorsement of sex-based stereotypes. Female-to-male IPV has consistently been rated as less serious, less frequent, and inconsequential relative to male-to-female IPV (Beyers et al., 2000; Felson & Feld, 2009; Hamby & Jackson, 2010; Poorman et al., 2003; Seelau et al., 2003; Seelau & Seelau, 2005; Stewart et al., 2012). Similarly, participants have been found less likely to convict a woman of murdering her husband, as compared to a man in a similar context (Hodell et al., 2014). Implications of these findings are troubling. By minimizing the severity or consequentiality of female perpetrated IPV, female perpetrators may not be identified, by others or by themselves, and thus it is unlikely they will receive assistance or treatment for such behaviour.

Joint Influence of Sex Role Ideology and Race

IPV perceptions have commonly been examined by researchers as a function of observer sex; though, the consistency and reliability of these differences has been contested. Unreliable sex differences have been reported in various domains of psychology (Yoder & Kahn, 2003),

including perceptions of IPV. Some studies have reported that female participants rate IPV incidents as more serious than males (Dardis et al., 2015; Hamby & Jackson, 2010; Hutchinson, 2012; Little & Terrance, 2010), and that females attribute more blame to perpetrators and less to victims (Hamby & Jackson, 2010), whereas other evidence suggests null effects of participant sex (Capezza et al., 2017; Kristiansen & Giulietti, 1990; Lehmann & Santilli, 1996; Sylaska & Walters, 2014, Wilson & Smirles, 2020). Amid unreliable findings, it can be posited that observer sex differences may be conflated with other factors, including sex role ideology. This notion was previously proposed in the context of date rape, that differing perceptions between men and women may actually reflect differences in sex role beliefs (Black & McCloskey, 2013).

Though constructs of sex role ideology have been heavily tied to an individual's sex, with females often endorsing egalitarian orientations and men traditionalist orientations (e.g., Steffens et al., 2014), younger age and/or having higher education have also been consistently associated with increased sex role egalitarianism (Ben-David & Schneider, 2005; King & King, 1990; Simonson & Subich, 1999). Given that a large body of IPV perception research is conducted among undergraduate or college students (e.g., Esqueda & Harrison, 2005; Rhatigan et al., 2011; Sylaska & Walters, 2014; Willis et al., 1996), it can be posited that observer endorsement of sex role ideology may be a more intuitive, conceptually relevant, and reliable measure than observer sex upon analyses. Consequently, effects of sex role ideology will instead be discussed herein.

In comparison to sex-based stereotypes, endorsement of sex role ideology may have a larger and more widespread impact on IPV perceptions. Sex role ideology constitutes a broader set of beliefs about how men and women are to act, including agreement or disagreement with stereotypical portrayals (see Saguy et al., 2021). In the IPV literature, sex role ideology has typically been measured using scales of traditional and egalitarian orientation (e.g., TESR,

Larsen & Long, 1988). Traditionalists are said to endorse greater conservative and authoritarian values, as well as supporting stronger, more rigid adherence to religious beliefs, compared to egalitarians (Larsen & Long, 1988). Moreover, traditionalists tend to rely more on sex polarization; that is, they believe there are innate differences between the roles of men and women (i.e., men as breadwinners, women as caretakers). In contrast, egalitarians are said to hold more liberal views of sex roles, wherein equal roles and responsibilities among men and women are supported (Davis & Greenstein, 2009).

Past literature has found that those endorsing more traditional sex role orientation are more likely to engage in victim blaming and attribute less blame to the perpetrator in situations of male-to-female IPV (Abrams et al., 2003; Angelone et al., 2012; Black & McCloskey, 2013; Erickson et al., 2017); this effect has been found to be even stronger when the victim is male (Little & Terrance, 2010; Seelau et al., 2003; Seelau & Seelau, 2005; Stewart et al., 2012). Those holding more traditionalist beliefs have also been found to rate IPV incidents as less serious, particularly when the perpetrator is female compared to male (Erickson et al., 2017).

Sex role ideology has also been found to impact race-related perceptions of IPV; in fact, earlier studies observed that endorsement of traditional sex roles was correlated with prejudice against Black Americans (Hoover & Fishbein, 1999), and that egalitarian beliefs may align with more liberal views of race issues (Biernat et al., 1996). Past findings have supported this association, suggesting that those with traditionalist orientations often perceive incidents of IPV in light of the victim's race, rating incidents with a Black victim as less abusive and recommending a lesser sentence for the perpetrator, compared to participants with more egalitarian beliefs (Willis et al., 1996).

More recently, Esqueda and Harrison (2005) examined the influence of sex role ideology and the couple's race (White or Black American) on perceptions of culpability in a male perpetrated incident of IPV among an American college sample. Participants with greater egalitarian beliefs were more likely to find the Black couple truthful about the incident in the police transcript, whereas those with traditionalists beliefs viewed the Black couple as less truthful, compared to the White couple. Thus, consistent with previous findings, the researchers suggested that egalitarian beliefs may align with more liberal views of race issues (Biernat et al., 1996).

Taken together, sex role ideology is an important influential factor in the examination of IPV perceptions, especially when manipulating perpetrator/victim race. Overall, individuals endorsing more traditional beliefs are more likely to engage in victim blaming and attribute less blame to the perpetrator, as well as find IPV incidents as less serious, compared to those with egalitarian beliefs (e.g., Black & McCloskey, 2013; Erickson et al., 2017). In terms of race, few studies have examined the joint influence of perpetrator/victim race and sex role ideology. In past studies, it was found that those with traditional beliefs were more likely to rate situations with a Black victim as less abusive, and perhaps less serious (Willis et al., 1996), as well as view Black couples as less truthful (Esqueda & Harrison, 2005), compared to their White counterparts. Though, in more recent studies, there is a notable lack of sex role ideology variables, with only symbolic racism scales used instead, albeit with no significant results (e.g., Rubenstein, 2016). Moreover, no studies were identified that examined the joint influence of sex role ideology and perpetrator/victim race on perceptions of female-to-male IPV. Further research is thus needed to address this substantial gap in the literature.

Just World Ideology and Victim Provocation

Another key aspect when assessing perceptions of IPV is the phenomenon of victim blaming. For example, 37% of Ontario residents were found to blame victims of IPV for remaining in a relationship with their abuser (Canada Newswire, 2016). Such phenomena may be attributed to just world ideology (Lerner & Miller, 1978). To justify a perpetrator's actions, observers may be inclined to endorse a just world mentality wherein "people get what they deserve" (Lerner, 1980). If an individual witnesses something unpleasant happen to another, the observer's just world beliefs may be threatened. Observer's may use different strategies to protect and reaffirm their beliefs in these situations. Commonly, individuals will make rationalizations that allow for the belief that the victim deserved such behaviour, while maintaining that if they themselves are good, such misfortunes will not happen to them (Lerner & Miller, 1978).

Historically, victim provocation has commonly been used to justify incidents of IPV and excuse male perpetrators. The stereotype that women provoke abuse by their male partner is often thought of as victim participation in abuse (Koss et al., 1994), or colloquially as, "they were asking for it". In modern day, the notion of victim participation may also be applied to male victims. Just world ideology may therefore be applied in situations involving male or female victim provocation as a means to justify the perpetrator's actions, or more broadly to perceive the perpetrator's behaviour as more reasonable and view the victim as at least partially responsible, as compared to scenarios without provocation.

Provocative victim behaviour has predominantly been studied in the context of verbal aggression by a female victim prior to male perpetrated IPV. Findings have consistently demonstrated that participants attribute more blame to female victims in situations with provocation, compared to without (Esqueda & Harrison, 2005; Kristiansen & Giulietti, 1990;

Rhatigan et al., 2011; Sorenson & Taylor, 2005; Stewart et al., 2012; Witte et al., 2006).

Participants have also recommended lesser sentences for a perpetrator when victim provocation occurred compared to not (i.e., yelled at husband vs not; Kern et al., 2007).

One study was identified that examined just world ideology and victim provocation in the context of female-to-male IPV. Rhatigan et al. (2011) varied the sex of perpetrator and level of verbal victim provocation across fictional IPV vignettes. Effects of victim provocation were especially prominent in situations with a female perpetrator compared to male; participants' attributions of blame and responsibility to the perpetrator significantly decreased when provocative victim behaviour was present, relative to when it was absent. The researchers attributed these findings to participants' belief in a just world, also suggesting that perhaps participants were influenced by preconceived notions that females do not typically engage in violence and thus searched for alternative situational variables to justify the female's actions.

In sum, studies have demonstrated that victim provocation is a significant factor associated with increased victim blaming in scenarios of male-to-female IPV; though, less is known about the effects of victim provocation in situations of female-to-male IPV. Examination of how factors such as victim provocation influence observer perceptions of victim blame, including the theoretical rationale fueling these beliefs, is imperative due to the far reaching and damaging implications. When victims are blamed for their own IPV victimization by the public, as it has the potential to impact victim experiences, legal outcomes, and normalize the use of relationship violence to perpetrators and their victims (e.g., Taylor & Sorenson, 2005). If a victim believes this is the norm, they may be less likely to engage in help-seeking behaviours and remain in the abusive situation (Yamawaki et al., 2012).

Social Learning Theory and Observer Victimization/Perpetration History

An individual's past experiences of victimization have been shown to have long lasting effects to their health and well-being and may even alter their world view. Social learning theory (Akers, 1998; Sellers et al., 2005) has been applied in the context of abuse and victimization, demonstrating how victimization experiences can alter an individual's perceptions of future events. Social learning theory addresses how behaviour, attitudes, and beliefs can be learned through social observation and modeling of parents, peers, or a combination of both. Witnessing violence or abuse among parents or peers that is positively reinforced, without reprimand, may lead an individual to learn that such acts are viewed as a normal or acceptable. As such, individuals with a history of childhood abuse may be less inclined to blame a perpetrator for their actions. Similarly, individuals with a history of IPV victimization or perpetration may also lead to normalization of abuse.

The association between childhood abuse and IPV among women has been heavily studied, finding that adult female victims of IPV are more likely to have also reported experiencing childhood abuse (e.g., Coid et al., 2001; Gladstone et al., 2004; Hetzel & McCanne, 2005; Messman-Moore et al., 2009; Rich et al., 2005; Ullman et al., 2009). This strong association may be attributed to the normalization of abuse via social learning theory (Akers, 1998; Sellers et al., 2005). However, among research on observer perceptions of IPV, results have been mixed.

Concerning IPV history, Rhatigan et al. (2011) reported significant findings of the two injurious IPV subscales (i.e., perpetration and victimization; CTS2, Straus et al., 1996) on blame attributions. Participants who indicated that they had perpetrated IPV injury were less likely to blame the perpetrator compared to those who hadn't perpetrated injury. Opposite effects were reported among participants who had been victimized by IPV injury; they were more likely to

blame the perpetrator. No significant effects of the psychological or physical (i.e., without injury) IPV subscales were reported.

In contrast, null effects of IPV history have also been reported on perceptions of seriousness and perpetrator/victim blame (e.g., Beyers et al., 2000; Bryant & Spencer, 2003; Rubenstein, 2016). In a recent study, Rubenstein (2016) assessed perceptions of IPV across situations of marital rape, physical assault, and verbal aggression. No significant effects of IPV victimization history (perpetration was not assessed) were observed on perceptions of seriousness, victim blame, or offender culpability in any of the IPV situation types. Amid mixed results, more research is needed to assess whether a significant association exists between IPV victimization/perpetration and observer perceptions of IPV.

In terms of child abuse history, past research has demonstrated an association between childhood abuse and greater acceptance of interpersonal violence in both youth (Foshee et al., 1999; Lichter & McCloskey 2004) and adult samples (Reitzel-Jaffe & Wolfe, 2001). Such results are consistent with the normalization of abuse as proposed by social learning theory (Sellers et al., 2005). However, the influence of childhood abuse experience on observer perceptions of IPV is far less researched, especially among undergraduate or college samples. One identified study reported that those who had experienced physical childhood abuse attributed less blame to IPV perpetrators, relative to those without such history; though, no significant effects of psychological childhood abuse were observed (Rhatigan et al., 2011).

Taken together, far more research is needed on the association between experiences of previous victimization/perpetration and observer perceptions of IPV. Theoretically, in line with social learning theory (Akers, 1998; Sellers et al., 2005), it can be posited that individuals with greater histories of victimization and/or perpetration would thus normalize abuse and perceive

incidents of IPV as acceptable; specifically, view IPV scenarios as less serious and blame the perpetrator less compared to those without such victimization/perpetration history. Despite this strong theoretical rationale, as well as real-world evidence demonstrating how childhood victimization may increase the likelihood of future victimization, the lack of consistent findings in the context of IPV perception research is troubling. As such, the current study aimed to assess the effects of past victimization/perpetration history on perceptions of seriousness, perpetrator blame, and victim blame in an exploratory nature.

1.5 Study Rationale

The main constructs identified in the literature which influence observer perceptions of IPV are the observer's beliefs (i.e., endorsement of sex-based and/or racial stereotypes, sex role ideology, belief in a just world). Observer belief variables have been shown to emphasize the perception differences reported in studies which manipulated victim/perpetrator sex, victim/perpetrator race (Black, White), and/or the presence of victim provocation. For example, observer endorsement of traditional sex role ideology, compared to egalitarian, has been associated with more negative views of Black perpetrators/victims, and overall greater likelihood of victim blaming (e.g., Esqueda & Harrison, 2005). However, these studies have been predominantly focused on male-to-female perpetration. As a result, several gaps in the literature remain pertaining to perceptions of female perpetrated IPV, specifically, the role of victim provocation and perpetrator/victim race (Black, White). No studies were identified which examined the joint effects of perpetrator/victim race and provocation on perceptions of female perpetrated IPV.

Other, less researched constructs which may influence perceptions of IPV are an observer's victimization/perpetration history, both as a child and in adulthood. Research on

individuals who have experienced childhood abuse and/or IPV victimization/perpetration are primarily done in real-world studies rather than experimental lab-based studies. The current study aimed to address this gap with exploratory analyses concerning the effect of observer victimization/perpetration history on perceptions of IPV.

1.6 Current Study

The main purpose of the current study was to assess how an observer's own ideological beliefs (i.e., sex roles, race biases, sex by race biases) influenced their perceptions of female perpetrated IPV. The secondary, exploratory goal was to explore how experiences of childhood abuse and/or IPV victimization/perpetration history may influence perceptions. Using an experimental online study, participants were shown one of two vignettes varying the presence of victim provocation. Alongside the vignette, photographs varying the race of perpetrator and victim (Black-Black, Black-White, White-Black, White-White) were presented. The study design was thus a 2 (provocation: present, absent) by 2 (perpetrator race: Black, White) by 2 (victim race: Black, White) fully crossed factorial design. A mixed-methods approach was used wherein participants completed both quantitative and qualitative outcome measures pertaining to perceptions of incident seriousness, blame, and responsibility, as well as measures pertaining to their ideological beliefs and victimization/perpetration history.

Hypotheses

Indeed, significant effects of perpetrator race, victim race, and couple racial composition have been found in experimental IPV research concerning Black and White couples. Though, these findings were observed among male-to-female scenarios of rape (George & Martinez, 2002), greater physical assault (i.e., pushing to ground, repeated face punching; Locke & Richman, 1999; shoving with definite injury; Rubenstein, 2016), where police were called to the

scene (Esqueda & Harrison, 2005), or the physical assault was serious enough to be tried in court (Willis et al., 1996). Significant effects of perpetrator race (Black, White) in female-to-male IPV have been observed in a mock jury study; though, in that scenario, a murder was committed (Mossiere et al., 2018). As the current study uses a female-to-male vignette with low intensity (i.e., a single slap occurs), significant effects of perpetrator or victim race (Black, White) are not anticipated on perceptions of incident seriousness, perpetrator blame, or victim blame. **H1: While controlling for racial bias (CoBRAS; Neville et al., 2000), no significant effects of perpetrator race or victim race (Black, White) are anticipated on perceptions of seriousness, perpetrator blame, or victim blame.**

Despite inconsistent results of observer sex on perceptions of IPV (e.g., significant: Hamby & Jackson, 2010, null: Capezza et al., 2017), research has consistently found significant effects of sex role ideology. Sex role ideology has been shown to influence perceptions of IPV, such that those with more traditionalist orientation are more likely to engage in victim blaming and attribute less blame to the perpetrator in situations of male-to-female IPV (Abrams et al., 2003; Angelone et al., 2012; Black & McCloskey, 2013; Erickson et al., 2017; Willis et al., 1996); this effect has been found to be even stronger when the victim is male (female-to-male and/or male-to-male: Brown, 2008; Little & Terrance, 2010; Seelau et al., 2003; Seelau & Seelau, 2005; Stewart et al., 2012). Those holding more traditional beliefs also rate IPV incidents as less serious (Willis et al., 1996), particularly when the perpetrator is female compared to male (Erickson et al., 2017). Consequently, I anticipate a significant effect of sex role ideology (TESR; Larsen & Long, 1988), such that those with more egalitarian orientation attribute more blame to perpetrator, less to victim, and view the incident as more serious, compared to those reporting more traditionalist orientations. **H2: While controlling for racial bias (CoBRAS),**

participants with greater traditional orientation (i.e., higher TESR scores) will attribute more blame to victim, less to perpetrator, and find scenarios less serious as compared to participants with more egalitarian orientation (i.e., lower scores).

As noted, sex role ideology has been found to be associated with views of racial issues, in that those with traditional orientation were found to view incidents with a Black victim as less abusive (Willis et al., 1996), and thus may be interpreted as less serious. As such, I expect an interaction between victim race and sex role ideology on perceptions of incident seriousness. More specifically, participants with more traditional orientation are anticipated to rate scenarios with a Black victim as less serious than situations with White victims, whereas participants with more egalitarian orientation will rate scenarios as equally serious, regardless of victim race.

A significant interaction may also occur on perceptions of perpetrator blame, as Willis et al. (1996) found those with traditional ideology were found to recommend a lesser sentence for the perpetrator when the victim was Black, and a longer sentence when the victim was White, compared to egalitarians. This may be interpreted as traditionalists attributing lesser blame to the perpetrator when the victim is Black, compared to White. In terms of victim blame, a non-significant interaction was hypothesized, as was observed by Willis et al. on the factor concerning victim responsibility. **H3: While controlling for racial bias (CoBRAS), participants with traditional orientation will rate scenarios with a Black victim as less serious and attribute less blame to the perpetrator, relative to situations with a White victim, whereas participants with more egalitarian orientation will rate scenarios as equally serious and attribute similar blame to the perpetrator, regardless of victim race. No significant interactions are anticipated on perceptions of victim blame.**

Past research has consistently shown that participants attribute less blame to the perpetrator and more blame to the victim when scenarios of IPV include victim provocation (e.g., Esqueda & Harrison, 2005); this effect has been found particularly strong in situations of female perpetrated IPV (Rhatigan et al., 2011). As such, significant effects of provocation are anticipated across measures of seriousness, perpetrator blame, and victim blame, such that participants in provocation conditions will rate scenarios as more serious, attribute less blame to perpetrator, and more blame to the victim than conditions without provocation. **H4: While controlling for racial bias (CoBRAS), scenarios with victim provocation will be rated as more serious, less blame will be attributed to the perpetrator, and more blame to the victim, relative to scenarios without provocation.**

Chapter 2: Method

2.1 Participants

A total of 912 first- and second-year undergraduate students registered in an introductory psychology course were recruited online through the Carleton University SONA system. However, a significant number were excluded due to the following a priori decision rules: did not complete study or finished in under 5 minutes (49), reported that they did not read the vignette (4), failed both attention checks (65), failed perpetrator/victim race and provocation manipulation checks in line with condition (216), indicated their data was of poor quality (3), asked their data not to be used either because it was of poor quality (53) or after debriefing (11). The exact nature of the attention and manipulation checks are described in the measures section. Thus, a final sample of 511 participants were retained for analysis.

Based on a self-report demographic questionnaire (Appendix J), participants were predominantly female ($n = 380$, 74.4%; male: $n = 112$, 21.9%, non-binary: $n = 19$, 3.7%), White ($n = 305$, 59.7%; Black: $n = 50$, 9.8%; Arab: $n = 34$, 6.7%), and 18–20 years of age ($M = 20.03$; $SD = 4.92$). Some participants also indicated they had been previously victimized by (32.9%) or perpetrated (9.6%) any type of IPV (see Table 1).

Table 1

Participant Demographics (N = 511)

Measure	Frequency	%
Sex		
Male	112	21.9
Female	380	74.4
Non-binary	19	3.7
Age		
17	5	1.0

18	190	37.2
19	144	28.2
20	61	11.9
21	38	7.4
22+	73	14.3
Race		
White	305	59.7
Black	50	9.7
Filipino	4	0.8
Latin American	14	2.7
Arab	34	6.7
South Asian	24	4.7
Southeast/West Asian	14	2.8
Chinese	18	3.5
Japanese	1	0.2
Indigenous	8	1.6
Other	39	7.6
IPV Victimization ^a		
Yes	168	32.9
No	329	64.4
Prefer not to answer	14	2.7
IPV Perpetration ^a		
Yes	49	9.6
No	451	88.3
Prefer not to answer	11	2.1

Note. a = results refer to IPV history as assessed by the demographic questionnaire. Results of the CTS2 measure (Straus et al., 1996) are presented in Table 5.

2.2 Vignette and Photographs

Two fictional, 200-word vignettes (Rhatigan et al., 2011) were adapted for use in the current study (see Appendix A). Vignettes portrayed a situation where the participant is asked to imagine they observed an incident of female perpetrated IPV between a college-aged heterosexual couple, wherein the girlfriend slaps the boyfriend and threatens that it'll hurt more the next time. The two vignettes differed by one sentence in which level of provocation was manipulated. In the non-provocation condition, the boyfriend replies, "I'm not sure. It might have been someone from class today" when asked by the girlfriend about who had called his phone. In the provocation condition, he instead replies, "Listen here, bitch, I told you never to answer my phone."

The two vignettes had been previously used to manipulate perpetrator/victim sex (Rhatigan et al., 2011), whereas the vignettes were adapted for the current study to manipulate the race of the perpetrator/victim (Black-Black, Black-White, White-Black, White-White), while keeping the sex of the perpetrator (female) and victim (male) constant. Four racial dyads were used for each provocation level (verbal provocation vs none), totaling 8 vignette conditions. Names of the girlfriend and boyfriend were omitted from the current study and a photograph of the girlfriend (White or Black) and boyfriend (White or Black) were instead provided depending on condition (see Appendix A).

Photographs were selected from the Chicago Face Database (Ma et al., 2015). The Chicago Face Database includes headshot photographs showing neutral expressions of various men and women aged 17–65. The photographs had been subjectively rated on various domains (e.g., age) by a sample of independent judges to provide norming data. Experts in the field of social psychology have also provided highly reliable expert ratings on these domains;

photographic stimuli from the Chicago Face Database have thus been deemed suitable for research purposes (Ma et al., 2015).

The current study used 4 photographs (i.e., Black female, Black male, White female, White male). Each photograph was matched on norming data by the current researcher such that all photos were similarly rated (i.e., Likert scales) on domains of age, attractiveness, dominant, prototypic, and threatening, to ensure consistency across conditions and avoid attributions resulting from such extraneous variables.

2.3 Measures

Incident Seriousness

The 5-item Perceived Seriousness of Violence measure ($\alpha = .84$; Yamawaki et al., 2009) was used to assess perceptions of incident seriousness (see Appendix B). The measure has demonstrated construct validity across American and Japanese countries (Yamawaki et al., 2009). Sample items included: “This incident probably left [victim] with psychological scars” and “This was a violent incident.” Responses demonstrated excellent internal consistency ($\alpha = .82$). The Likert scale of 1 (*strongly agree*) to 7 (*strongly disagree*) was reversed for the current study so that all Likert scales presented to participants were in the same direction. Scores were then averaged across all items (plausible range: 1–7), with higher scores indicating increased perceptions of incident seriousness.

Perpetrator/Victim Blame and Responsibility

The Blame and Responsibility measure (Trangsrud, 2010; adapted from Abrams et al., 2003, Gerber et al., 2004) was used to assess attributions of blame and responsibility to both the perpetrator and victim. This adapted measure was previously used by Trangsrud (2010) in examination of sexual IPV perceptions among a college-aged sample with excellent reliability (α

= .92 for both victim and perpetrator blame items). Six parallel items were used for each respective party, including “The [boyfriend/girlfriend]’s behaviour was responsible for the event that occurred at the end of the scenario” and “The [boyfriend/girlfriend] was to blame for the event that occurred at the end of the scenario”. Items were rated on a Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*) and averaged separately to provide a measure of perpetrator blame ($\alpha = .89$; plausible range: 1–7) and victim blame ($\alpha = .94$; plausible range: 1–7). Higher scores indicated greater blame to the perpetrator/victim for the IPV incident. See Appendix C.

Post-Vignette Questionnaire

Participants were also asked to complete 3 open-ended questions to provide further justification for their Likert ratings (Appendix D). The questions were as follows: “Do you think the incident was serious in nature? Why or why not?”; “Who do you think is to blame for the incident? Why?”; “What did you think of the incident in general?”

Sex Role Ideology

The Traditional and Egalitarian Sex Role Inventory (TESR; Larsen & Long, 1988) was used to assess the extent to which participants adhered to sex role stereotypes (see Appendix E). The 20-item measure included items such as, “Men who cry have weak character.” The TESR measure has reported high scale reliability and concurrent validity (Larsen & Long, 1988), and has been used in similar studies with excellent reliability ($\alpha = .88$; Esqueda & Harrison, 2005). Items were scored on a Likert scale of 1 (*strongly disagree*) to 7 (*strongly agree*); this reverse order was used so that all Likert scales were directionally consistent when presented to participants. Sum scores were calculated for each participant ($\alpha = .87$), rather than average scores, to ease comparisons of TESR distributions with past studies (e.g., Esqueda & Harrison,

2005; Willis et al., 1996). The plausible range was 20–140, with higher scores indicating more traditional sex role orientation, whereas lower scores indicated greater egalitarian orientation.

Racial Bias

The Color-Blind Racial Attitudes Scale (CoBRAS; $\alpha = .86$; Neville et al., 2000) assessed three factors concerning attitudes towards White and Black persons (i.e., unawareness of racial privilege, unawareness of institutional discrimination, and unawareness to blatant racial issues). Initial scale testing demonstrated construct, discriminant, concurrent, and criterion-related validity (Neville et al., 2000). Notably, concurrent validity was supported by significant correlations with measures of racial prejudice. Items were modified to reflect the Canadian context of the current study; mentions of the United States were replaced with Canada. The 20-item scale thus included items such as, “Race plays an important role in who gets sent to prison” and “White people in Canada have certain advantages because of the color of their skin”. Items were scored on a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) and summed across all factors to provide a total score of racial bias ($\alpha = .88$). Higher scores indicated racial intolerance and skepticism that Black-White racial issues are a societal problem in Canada (plausible range: 20–100). See Appendix F.

Feeling Thermometers

Feeling thermometers are a commonly used survey tool to assess a respondent’s attitudes and feelings about a given issue, group, or person (Lavrakas, 2008). Participants can apply a numeric rating to quantify their attitudes and feelings, from 0 (*very cold*) to 100 (*very warm*). Ratings below 50 are said to demonstrate dislike or negative views of the given party (Lavrakas, 2008). Two feeling thermometers were used in the current study to assess participant attitudes

and feelings towards Black Canadians and White Canadians (Appendix G). Lower scores thus indicated a dislike of Black or White Canadians, respectively.

Childhood Abuse

Two subscales (psychological abuse, physical abuse) from the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998) were used in the current study (Appendix H). Convergent validity of the CTQ has been demonstrated with therapists' ratings of abuse and a clinician interview of childhood abuse (Bernstein et al., 1997; Bernstein & Fink, 1998). Psychological subscale items included, "People in my family said hurtful or insulting things to me", whereas physical subscale items included, "Got hit so hard that I had to see a doctor or go to the hospital." The two subscales have been previously used in a methodologically similar study with good reliability (psychological: $\alpha = .85$; physical: $\alpha = .76$; Rhatigan et al., 2011). Excellent reliability was similarly observed for each subscale in the current study (psychological: $\alpha = .91$; physical: $\alpha = .85$). Each 5-item subscale was rated on a Likert scale from 1 (*never true*) to 5 (*very often true*). Scores were then averaged for each subscale (plausible range: 1–5), with higher scores indicating greater experiences of psychological or physical childhood abuse, respectively.

IPV History

The Revised Conflict Tactics Scale (CTS2; Straus et al., 1996) is one of the most widely used measures used in IPV research to assess previous exposure to, and perpetration of, IPV (Capaldi et al., 2012). The CTS2 has demonstrated concurrent validity across five studies of university student dating couples, finding significant correlations with measures of similar constructs (Straus, 2004). A recent study has also supported the CTS2 as a valid and reliable measure of IPV across community and clinical samples (Chapman & Gillespie, 2019).

Psychological aggression, physical assault, and injury subscales were assessed in terms of both participant perpetration and victimization experience with their (previous) partner (six subscales total; see Appendix I). Items assessed both participant behaviour and that of their partner on an 8-point Likert scale from 0 (*never happened*) to 6 (*happened more than 20 times in the past year*); participants were also able to select 7 if it had happened previously but not in the prior 12 months (i.e., lifetime prevalence). Items included, “In the past year, I threw something at my partner that could hurt” and following “My partner did this to me”. Scores for the three perpetration subscales and three victimization subscales demonstrated excellent reliability (range: $\alpha = .77-.92$). Consistent with past research (Rubenstein, 2016) and CTS2 scoring recommendations (Straus & Zarza, 2004), scores for each subscale were computed with binary outcomes of (0 = *never happened*, 1 = *happened 1+ times previously*); thus, scores ranged from 0–1 for each of the six subscales. Due to the structure of the Likert scale, with the highest value (7) indicating lifetime prevalence, sum scores were not computed.

Manipulation Check

Participants were asked to identify both the race of the girlfriend and boyfriend in the vignette as a manipulation check (see Appendix K). An additional manipulation check question was asked regarding provocation, reading: “How did the boyfriend respond when the girlfriend asked who had called his phone?”, with response options, “He responded calmly” and “He swore at her”. Participants were excluded from analysis if they did not correctly answer the manipulation checks in line with their condition assignment ($n = 216$).

Attention Check

Five attention check items were implemented throughout the study. First, participants were asked to confirm that they had reviewed the vignette. Second, one item asking participants

to select “strongly disagree”, and one to select “strongly agree” were randomly included in the TESR scale (Larson & Long, 1988) and CoBRAS scale (Neville et al., 2000), respectively. Participants who did not correctly answer both attention check items were excluded from analysis ($n = 65$). A similar attention check policy is used by the online participant recruitment platform, Prolific; participants must fail at least two instructional attention checks to be excluded from analyses (Prolific, 2022). Finally, two items taken from Meade and Craig (2012) were used to assess the participant’s perceived quality of their data (see Appendix L). The first item read:

It is vital to our study that we only include responses from people that devoted their full attention to this study. Otherwise, years of effort (the researchers’ and the time of other participants) could be wasted. You will receive credit for this study no matter what, however, please tell us how much effort you put forth towards this study.

The response read, “I gave this study ____ attention:”, with options, from 1 (*almost no*) to 5 (*a lot of*). Participants who selected 1 or 2 were excluded from the study ($n = 3$). The second item read, “In your honest opinion, should we use your data in our analyses in this study?”, with a forced “yes” or “no” response. Participants that selected “no” had their data excluded from the study ($n = 53$).

2.4 Procedure

After ethics clearance was received from CUREB (#116382), participants enrolled in first- and second-year introductory psychology courses were recruited online from the Carleton SONA system. The recruitment notice stated the study pertained to *Perceptions of Relationship Dysfunction*, and a link was provided after study sign-up to access the study hosted on Qualtrics. Participants were granted 0.5% course credit for participating in the 35-minute online study.

The current study used a 2 (provocation: present, absent) by 2 (perpetrator race: White, Black) by 2 (victim race: White, Black) fully crossed factorial design. After consent was provided, participants were randomly assigned to one of eight vignette conditions, wherein the level of provocation was varied in the vignette (i.e., victim did not swear at perpetrator vs victim swore at perpetrator), and the race of the girlfriend (perpetrator) and boyfriend (victim) were varied with photographs. The eight conditions are therefore as follows: Unprovoked-Black-Black, Unprovoked-Black-White, Unprovoked-White-Black, Unprovoked-White-White, Provoked-Black-Black, Provoked-Black-White, Provoked-White-Black, Provoked-White-White. Participants were then asked to confirm they had reviewed the vignette. Next, participants were asked to complete multiple Likert ratings pertaining to the perceived seriousness of the incident, and parallel measures of perpetrator/victim blame.

Open-ended questions pertaining to seriousness, overall blame, and general thoughts about the incident were then completed by participants to provide further justification for their Likert ratings. Following, participants completed measures assessing endorsement of traditional sex roles, childhood abuse experiences, IPV perpetration and victimization history, White-Black racial bias, and demographic information. Two attention checks were randomly included in each measure of sex roles and racial bias. Next, participants completed manipulation check questions concerning the girlfriend's race, boyfriend's race, and level of provocation in the vignette they read. Finally, two attention check items assessing the perceived quality of participant data were completed.

Chapter 3: Results

3.1 Descriptive Statistics

Missing data

Missing data ranged from 0.2% to 0.4% on items from the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). No other measures recorded missing data.

Outliers

The number of univariate and multivariate outliers ranged from none (0) to many (17) across dependent variables (i.e., incident seriousness, perpetrator blame, and victim blame), as well as independent variables (i.e., sex role ideology, racial bias, and childhood abuse). Observed outliers were not a result of participant error or out of range data, rather, a result of the context of the current study. Research on sensitive topics such as IPV perceptions, sex role ideology, and racial bias may cause participants to feel strongly about the subject matters and, in turn, provide relatively extreme ratings. As such, it would be inappropriate to exclude outliers on this basis. All outliers were retained for analysis; assumption checks ensured that no cases biased the analytic models.

Bivariate Correlations

Bivariate correlations were assessed for all study variables (Table 2, 3). Dependent variables of seriousness, perpetrator blame, and victim blame all showed significant moderate-large correlations (range: $r = .40-.70$). Other notable moderate correlations occurred between the measures of sex role ideology (TESR) and racial bias (CoBRAS; $r = .52$) and between victim blame and provocation ($r = .54$). All six binary subscales concerning previous IPV victimization (psychological, physical, injury; CTS2) and perpetration (psychological, physical, injury) were also significantly correlated (range: $r = .19-.79$), with the strongest bivariate correlation among

all study variables occurring between the psychological perpetration and psychological victimization subscales ($r = .79$).

Feeling Thermometers

Two feeling thermometers (0 - 100) assessed participants' feelings towards White Canadians and Black Canadians, respectively. Findings demonstrated that participants predominantly provided ratings of 50 or 100. Past researchers have highlighted similar issues with feeling thermometers; despite the large spectrum, some participants restrict their ratings to small portions of the scale (Lavrakas, 2008). Further inspection of correlation matrices (Table 2) indicated that the White Canadian feeling thermometer was not significantly correlated with the dependent variables and had a low correlation with the measure of racial bias (CoBRAS; Neville et al. 2000). In contrast, the Black Canadian feeling thermometer was weakly correlated with dependent variables of seriousness and perpetrator blame, but uncorrelated with victim blame and racial bias (CoBRAS). Due to the inconsistent and weak associations among the feeling thermometers and other study variables, both feeling thermometers were omitted from subsequent analyses. The CoBRAS measure (Neville et al., 2000) was instead used as a control variable of racial bias.

IVs: Perpetrator/Victim Race, Provocation, Sex Role Ideology, Racial Bias

The current study used a 2 (provocation: present, absent) by 2 (perpetrator race: White, Black) by 2 (victim race: White, Black) fully crossed factorial design. Participants were thus randomly assigned to one of eight conditions in which victim provocation and perpetrator/victim race were varied. Large cell counts were observed across conditions, ranging from 52 (Provoked, Black perpetrator, Black victim) to 71 (Provoked, White perpetrator, Black victim).

Table 2*Correlations of Condition Variables, Dependent Variables, Sex Role, and Race Variables (N = 511)*

	1	2	3	4	5	6	7	8	9	10
1. Provoked ^a	-									
2. Perp Race ^b	-.01	-								
3. Victim Race ^c	.04	-.05	-							
4. Seriousness ^d	-.17**	-.04	.06	-						
5. Perp Blame ^e	-.36**	-.09*	.05	.50**	-					
6. Victim Blame ^f	.54**	.02	-.04	-.40**	-.70**	-				
7. TESR ^g	-.01	.00	.03	-.23**	-.20**	.16**	-			
8. CoBRAS ^h	.02	-.03	-.08	-.26**	-.22**	.15**	.52**	-		
9. Thermometer-W ⁱ	.01	-.03	.01	.01	-.00	.03	.01	.25**	-	
10. Thermometer-B ^j	.02	.06	.06	.13**	.09*	-.03	-.14**	-.07	.57**	-

Note. a = provocation condition. b = Black perpetrator race condition. c = Black victim race condition. d = average score on the Perceived Seriousness of Violence scale (Yamawaki et al., 2009). e = average score on Perpetrator Blame scale (Trangsrud, 2010). f = average score on Victim Blame scale (Trangsrud, 2010). g = Traditional and Egalitarian Sex Role Inventory (Larsen & Long, 1988). h = Color-Blind Racial Attitudes Scale (Neville et al., 2000). i = 1-100 ratings of positive feelings towards White Canadians. j = 1-100 ratings of positive feelings towards Black Canadians.

* $p < .05$. ** $p < .01$.

Table 3*Correlations of Dependent Variables, IPV Perpetration/Victimization History, and Childhood Abuse (N = 511)*

	1	2	3	4	5	6	7	8	9	10	11
1. Seriousness ^a	-										
2. Perp Blame ^b	.50**	-									
3. Victim Blame ^c	-.40**	-.70**	-								
CTS-P ^d											
4. Physical	-.12**	-.08	.08	-							
5. Psychological	.03	.04	-.07	.27**	-						
6. Injury	-.02	-.01	.03	.53**	.19**	-					
CTS-V ^e											
7. Physical	-.06	-.04	.03	.71**	.27**	.61**	-				
8. Psychological	.06	.04	-.06	.26**	.79**	.23**	.31**	-			
9. Injury	-.13**	-.05	-.07	.52**	.18**	.73**	.45**	.17**	-		
CTQ ^f											
10. Physical	.12**	-.02	.04	.04	.13**	.13**	.14**	.16**	.05	-	
11. Psychological	.14**	.06	-.00	.05	.12**	.16**	.19**	.16**	.07	.58**	-

Note. a = average score on the Perceived Seriousness of Violence scale (Yamawaki et al., 2009). b = average score on Perpetrator Blame scale (Trangsrud, 2010). c = average score on Victim Blame scale (Trangsrud, 2010). d = Perpetration items from the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). e = Victimization items from the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). f = average score on the physical and psychological subscales of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998).

* $p < .05$. ** $p < .01$.

In terms of sex role ideology, the sample scored very low on the measure overall (TESR; $M = 32.0$, $SD = 13.6$, $Mdn = 27.0$; plausible range: 20–140), indicating high sex role egalitarianism (see Table 4). High skewness (2.5) and kurtosis (4.5) were observed, resulting in a non-normal distribution (Kolmogorov-Smirnov; K-S: $p < .001$). Similarly, low scores on the measure of racial bias were observed (CoBRAS; $M = 38.9$, $SD = 12.0$; plausible range: 20–100), indicating that the sample was cognizant of Black/White racial issues in Canadian society. The CoBRAS measure also demonstrated some skewness (0.8) and kurtosis (0.6) and had a non-normal distribution (K-S: $p < .001$). Additionally, the TERS and CoBRAS measures were mean centered prior to analyses to ease coefficient interpretation and avoid multicollinearity in product terms (Iacobucci et al., 2016).

Table 4

Means and Standard Deviations of Continuous Measures

Measure	<i>M</i>	<i>SD</i>	<i>Mdn</i>	Min	Max	Skew	Kurt	α
Seriousness ^a	5.3	1.1	5.4	1	7	-0.8	0.8	.82
Perpetrator Blame ^b	5.8	1.2	6.1	1	7	-1.3	1.6	.89
Victim Blame ^c	2.5	1.4	2.0	1	7	0.9	-0.1	.94
TESR ^d	32.0	13.6	27.0	20	101	2.1	4.5	.87
CoBRAS ^e	38.9	12.0	37.0	20	87	0.8	0.6	.88
Childhood abuse ^f								
Physical	1.5	0.8	5.0	1	5	2.3	5.1	.91
Psychological	2.4	1.3	10.0	1	5	0.7	-0.9	.85

Note. a = average score on the Perceived Seriousness of Violence scale (Yamawaki et al., 2009). b = average score on Perpetrator Blame scale (Trangsrud, 2010). c = average score on Victim Blame scale (Trangsrud, 2010). d = Traditional and Egalitarian Sex Role Inventory (Larsen & Long, 1988). e = Color-Blind Racial Attitudes Scale (Neville et al., 2000). f = average score on the physical and psychological subscales of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998).

DVs: Incident Seriousness, Perpetrator Blame, Victim Blame

Across conditions, the sample reported high ratings of incident seriousness ($M = 5.3$; $SD = 1.1$; plausible range: 1–7), high perpetrator blame ($M = 5.8$; $SD = 1.2$; plausible range: 1–7), and low victim blame ($M = 2.5$; $SD = 1.4$; plausible range: 1–7). All distributions were non-normal (K-S: $p < .001$) and demonstrated some skewness (range: -1.3–0.9) and kurtosis (range: -0.1–1.6). See Table 4 for full description.

Exploratory Measures: IPV Victimization/Perpetration, Childhood Abuse

In terms of IPV victimization, the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996) revealed that most participants had been psychologically victimized by IPV at least once previously (71.4%; 25.4% physical; 8.2% injury). Similar proportions were observed for IPV perpetration (74.4%; 22.5% physical, 11.7% injury; Table 5). Such prevalence rates are consistent with the prevalence statistics of undergraduate students reported by the scale creators (Straus et al., 1996).

Interestingly, findings from the CTS2 (Straus et al., 1996) did not align with participant self-report responses from the demographic questionnaire (Table 1). When asked if participants had ever perpetrated or been victimized by any type of IPV (psychological, physical, injury) in the demographic questionnaire, the proportion of participants which responded “yes” (32.9% victimization; 9.6% perpetration) significantly contrasted what was observed in the CTS2 measure (Table 5), especially as it concerns psychological perpetration/victimization. While the reference point of IPV used by participants when answering the demographic questionnaire remains unknown, it can be posited that such discrepancies may be attributed to the varying subjective definitions of IPV. For example, some participants may not have considered their past actions or actions of their partner as IPV when asked in the demographic questionnaire, though

the CTS2 may have classified those actions as such (i.e., threatening to hit or throw something at your partner).

Table 5

Lifetime Prevalence of IPV assessed by the Revised Conflicts Tactics Scale^a (N = 511)

Scale	Frequency	%
Perpetration ^b		
Psychological		
Never	133	26.0
At least once previously	378	74.0
Physical		
Never	396	77.5
At least once previously	115	22.5
Injury		
Never	451	88.3
At least once previously	60	11.7
Victimization ^c		
Psychological		
Never	146	28.6
At least once previously	365	71.4
Physical		
Never	381	74.6
At least once previously	130	25.4
Injury		
Never	469	91.8
At least once previously	42	8.2

Note. a = CTS2; Larsen & Long, 1988. b = IPV perpetration subscales from the CTS2. c = victimization subscales from the CTS2.

Subscales of psychological and physical childhood abuse from the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink; 1998) also indicated that participants more often

experienced psychological abuse ($M = 2.4$, $SD = 1.3$; plausible range: 1–5) than physical abuse ($M = 1.5$, $SD = 0.8$; plausible range: 1–5). Both childhood abuse subscale distributions were non-normal (K-S: $p < .001$) and demonstrated skewness (psych: 0.7; physical: 2.3) and kurtosis (psych: -0.9; physical: 5.1). See Table 4 for full description.

3.2 Control Variable – Racial Bias

In the following exploratory and main analyses, the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) was added to the models of incident seriousness, perpetrator blame, and victim blame in attempt to control for the effects of Black/White racial bias. In the exploratory analyses, the aim was to assess if observer history of IPV perpetration or victimization (psychological, physical, and injury) and childhood abuse (psychological and physical) predicted ratings of seriousness, perpetrator blame, and victim blame beyond the effects of racial bias. In the main analyses, the aim of was to assess if perpetrator/victim race (H1), sex role ideology (H2, H3), and provocation (H4) predicted ratings of seriousness, perpetrator blame, and victim blame beyond the effects of racial bias. The measure of racial bias (CoBRAS) was viewed as a valid control variable as it was significantly correlated with all three dependent variables: incident seriousness, perpetrator blame, and victim blame (Table 2).

3.3 Exploratory Analyses: Observer Victimization/Perpetration History

Exploratory analyses pertained to the effects of observer victimization/perpetration history. A series of multiple linear regression analyses were conducted to evaluate if an observer's history of IPV perpetration (psychological, physical, injury; CTS2), IPV victimization (psychological, physical, injury; CTS2), and childhood abuse (psychological, physical; CTQ) predicted ratings of incident seriousness (Table 6), perpetrator blame (Table 7), and victim blame (Table 8). All assumptions of multiple regression were met, except for homoscedasticity.

Table 6

IPV Perpetration/Victimization and Childhood Abuse Variables Regressed on Ratings of Incident Seriousness (with Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	5.00	0.13	37.27	< .001	4.74	5.27
CoBRAS ^d	-0.02	0.00	-5.70	< .001*	-0.03	-0.02
CTS-P ^e						
psychological	-0.08	0.18	-0.48	.634	-0.43	0.26
physical	-0.18	0.16	-1.11	.269	-0.49	0.14
injury	0.62	0.21	2.94	.003*	0.20	1.03
CTS-V ^f						
psychological	0.26	0.18	1.45	.147	-0.09	0.61
physical	-0.16	0.18	-0.91	.365	-0.51	0.19
injury	-0.83	0.26	-3.25	.001*	-1.33	-0.33
CTQ ^g						
psychological	0.03	0.05	0.56	.576	-0.07	0.13
physical	0.13	0.07	1.91	.057	-0.00	0.27

Note. $R^2 = .12$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .005, significance will only be flagged at this value. d = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000). e = Perpetration subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). f = victimization subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). g = subscales of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998).

* $p < .005$

Consequently, HC3 consistent standard errors were used in the exploratory models (Long & Ervin, 2000). The effects of individual predictors were assessed with Bonferroni adjusted p-values of 0.006 per test (.05/9) to account for multiple comparisons. The coefficient estimates reported for individual predictors are raw/unstandardized (*b*).

As noted, racial bias (CoBRAS; Neville et al., 2000) was used as a control variable because it was significantly correlated with all three dependent variables: seriousness, perpetrator blame, and victim blame. The use of racial bias as a control variable was further validated as it was a significant predictor in the models of seriousness ($b = -0.02, t = 5.70, p < .001$; Table 6), perpetrator blame ($b = -0.02, t = -4.94, p < .001$; Table 7), and victim blame ($b = 0.02, t = 3.33, p < .001$; Table 8). This demonstrated that, for every 1-unit increase above the mean of racial bias (CoBRAS), ratings of seriousness decreased by 0.02, perpetrator blame decreased by 0.02, and victim blame increased by 0.02 on the respective 7-point Likert scales. This effect remained significant in all models, given the adjusted Bonferroni p-value of .006 per test (.05/9).

Concerning IPV victimization (CTS2; Straus et al., 1996), the injury subscale was significant in the model of incident seriousness ($b = -0.83, t = -3.25, p = .001$), suggesting that participants who had been victimized by IPV which caused injuries rated scenarios as 0.83 units less serious on the 7-point Likert scale than participants who hadn't been victimized by injurious IPV (Table 6). The effect size was small ($\eta_p^2 = .02$), though remained significant given the adjusted Bonferroni p-value of .006 per test (.05/9).

In terms of IPV perpetration (CTS2; Straus et al., 1996), the injury subscale was also a significant predictor of incident seriousness ($b = 0.62, t = 2.94, p = .003$), suggesting that participants who had perpetrated injurious IPV rated scenarios as 0.62 units more serious on the 7-point Likert scale than participants who hadn't perpetrated injurious IPV (Table 6). This effect

Table 7

IPV Perpetration/Victimization and Childhood Abuse Variables Regressed on Ratings of Perpetrator Blame (with Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	5.73	0.15	37.90	< .001	5.43	6.03
CoBRAS ^d	-0.02	0.00	-4.94	< .001*	-0.03	-0.01
CTS-P ^e						
psychological	0.08	0.18	0.47	.641	-0.26	0.43
physical	-0.25	0.17	-1.53	.128	-0.58	0.07
injury	0.35	0.23	1.56	.119	-0.09	0.80
CTS-V ^f						
psychological	0.11	0.16	0.66	.511	-0.21	0.42
physical	-0.04	0.17	-0.22	.823	-0.36	0.29
injury	-0.41	0.26	-1.18	.240	-0.82	0.21
CTQ ^g						
psychological	0.05	0.06	0.86	.392	-0.06	0.16
physical	-0.09	0.08	-1.13	.260	-0.25	0.07

Note. $R^2 = .06$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .005, significance will only be flagged at this value. d = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000). e = Perpetration subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). f = victimization subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). g = subscales of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998).

* $p < .005$

Table 8

IPV Perpetration/Victimization and Childhood Abuse Variables Regressed on Ratings of Victim Blame (with Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	2.50	0.18	14.06	< .001	2.15	2.85
CoBRAS ^d	0.02	0.01	3.33	< .001	0.01	0.03
CTS-P ^e						
psychological	-0.27	0.22	-1.21	.229	-0.71	0.17
physical	0.35	0.23	1.51	.132	-0.11	0.80
injury	-0.36	0.32	-1.12	.265	-0.99	0.27
CTS-V ^f						
psychological	-0.06	0.21	-0.27	.784	-0.48	0.36
physical	-0.06	0.22	-0.28	.783	-0.49	0.37
injury	0.49	0.38	1.27	.203	-0.26	1.23
CTQ ^g						
psychological	0.02	0.07	0.26	.799	-0.11	0.15
physical	0.07	0.10	0.70	.485	-0.13	0.27

Note. $R^2 = .04$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .005, significance will only be flagged at this value. d = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000). e = Perpetration subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). f = victimization subscales of the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996). g = subscales of the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998).

* $p < .005$

was also small ($\eta_p^2 = .02$), though remained significant given the adjusted Bonferroni p-value of .006 per test (.05/9). No other IPV subscales were significant predictors of any model. Similarly, neither childhood abuse subscale (CTQ) was significant in the models of seriousness (Table 6), perpetrator blame (Table 7), or victim blame (Table 8).

3.4 Main Analyses

In the main analyses, a series of multiple linear regression analyses were conducted to evaluate if perpetrator and victim race (H1), sex role ideology (H2, H3), and victim provocation (H4) significantly predicted participants' ratings of incident seriousness (Table 9, 10), perpetrator blame (Table 11, 12), and victim blame (Table 13, 14). The Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) was also used to control for participants' Black/White racial bias. Assumptions of multiple regression were tested for each of the three models (i.e., incident seriousness, perpetrator blame, victim blame).

Assumptions

First, to assess the linear relationship between variables, scatterplots were created for each continuous IV and DV pair, including the hypothesized interaction between victim race and sex role ideology (H3). For all DV and IV pairs, scatterplots indicated that the associations could be modelled by a straight line; the assumption of linearity was thus met. As the condition variables were categorical and dummy coded, no linearity assumption was necessary.

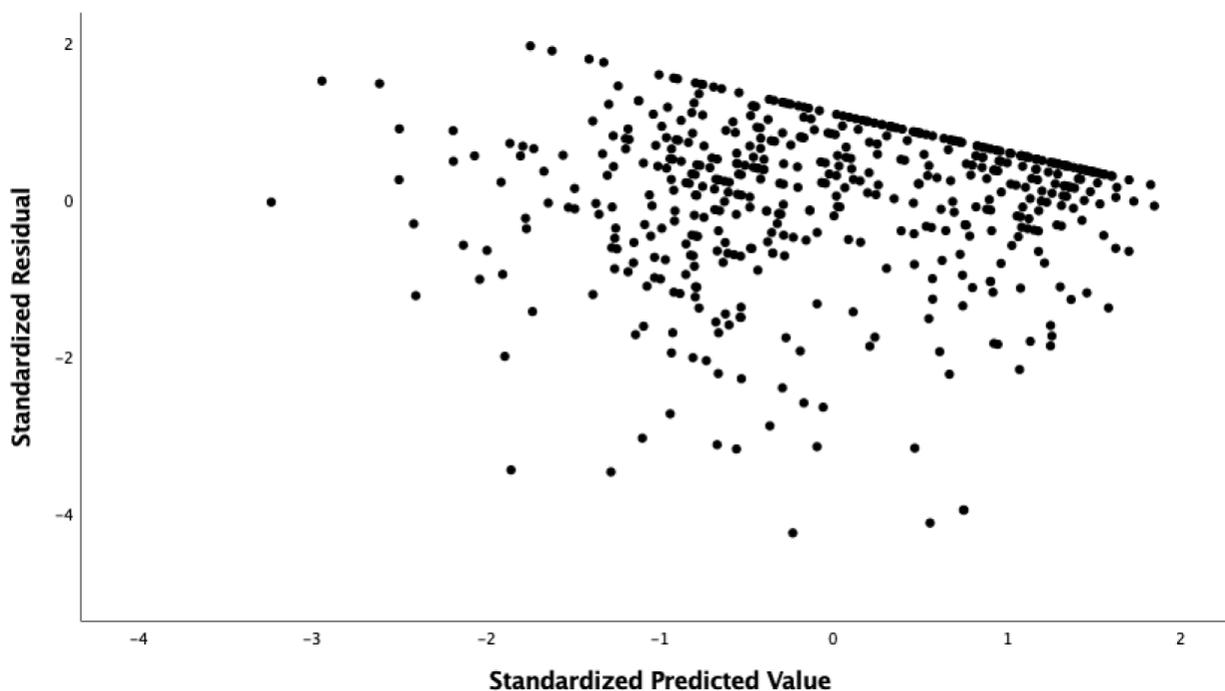
The remaining assumptions were tested by running a series of multiple linear regressions. After inspection of all correlation matrices ($r = < .8$), tolerance (> 0.2), and VIF values (< 4), there was no evidence of multicollinearity in any model. Independence of residuals was also assumed for all models (Durbin-Watson = ~ 2). The Cook's Distance statistic was used to ensure

that no influential cases were biasing the models. As no value of Cook's Distance was equal to or exceeded 1, this assumption was met for all models.

Next, normality of residuals was assessed by inspecting histograms of standardized residuals and P-P plots. Concerning the model of seriousness, histograms appeared relatively normal, though there were small deviations from the normal line on the P-P plot. For the models of perpetrator blame and victim blame, histograms indicated some skewness and kurtosis of residuals for each variable, and P-P plots indicated more prominent deviation from the normal line. Though these potential violations were flagged, normality assumptions can be relaxed given a large N (Schmidt & Finan, 2018).

Figure 1

Evidence of Heteroscedasticity in the Model of Victim Blame



Finally, plots of standardized residuals by standardized predicted values were inspected to assess homoscedasticity for each model. A fan-shaped spread of residuals was identified in

each plot; though, the spread was much more prominent in the models of perpetrator blame and victim blame (see Figure 1). This evidence suggests heteroscedasticity of residuals in each model. As the normality of residuals was flagged for potential violations, it follows that homoscedasticity may also be violated. In the subsequent models, an F-test for heteroscedasticity was conducted, which assumes that the residuals are independent and identically distributed. Models of perpetrator blame ($F(1, 509) = 7.92, p = .005$), and victim blame ($F(1, 509) = 21.81, p < .001$), reported significant F-tests, indicating the presence of heteroscedasticity.

Heteroscedastic-consistent standard errors (i.e., robust; HC3 method) were therefore used to analyze results. The HC3 method has been found robust against homoscedasticity assumption violations (Long & Ervin, 2000).

Model

The main analyses used a series of univariate General Linear Models (GLM) to examine if perpetrator and victim race (H1), sex role ideology (H2), and victim provocation (H4) significantly predicted participants' ratings of incident seriousness, perpetrator blame, and victim blame. The univariate GLM function in SPSS v28 was used for analyses, rather than the linear regression function, as GLM allows for outputs with and without HC3 corrected, robust standard errors. The construction of the GLM model was identical to that of linear regression, aside from the additional request of robust standard errors.

Perpetrator race and victim race were similarly coded as White (0) and Black (1); victim provocation was coded as absent (0) and present (1). All models also included the measure of sex role ideology (TESR; Larsen & Long, 1998) and an interaction between victim race and sex role ideology. Presence of all two-way interactions between provocation, perpetrator race, and victim race were also entered in the models to check if the model specification was correct. As no

interactions were significant in any model, and there were no hypothesized two-way interactions among condition variables, interaction terms were removed for final analysis.

All 3 models were first run without the control variable of racial bias (CoBRAS; Neville et al., 2000), then each model was run once more with the inclusion of the control variable of racial bias. The control variable is discussed further in the next section. The effects of individual predictors will be assessed with Bonferroni adjusted p-values of 0.01 per test (.05/5) in models without the control variable of racial bias (CoBRAS), and adjusted p-values of .008 per test (.05/6) in models with the control variable of racial bias. All coefficient estimates reported for individual predictors are raw/unstandardized (*b*).

Control Variable – Racial Bias

As noted, the measure of racial bias (CoBRAS; Neville et al., 2000) was added to the models to assess if perpetrator/victim race (H1), sex role ideology (H2, H3), and provocation (H4) predicted ratings of seriousness, perpetrator blame, and victim blame beyond the effects of the racial bias. The CoBRAS measure was significantly correlated with all three dependent variables (Table 2) and shown to be a significant predictor in the exploratory regression analyses of seriousness, perpetrator blame, and victim blame (see Tables 6-8). As such, the CoBRAS measure was deemed as a suitable control variable of racial bias for the main analyses. Results of each individual model will first be discussed without the control variable of racial bias, then with the control variable.

Concerning the model of seriousness, results of the multiple regression model without the control variable of racial bias indicated that there was a collective significant effect between provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology, ($F(5, 505) = 10.79, p < .001, R^2 = .09$). When the control variable of racial bias was added, the

Table 9

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Incident Seriousness (without Control Variable of Racial Bias)

Effect	Estimate ^a	SE ^b	<i>t</i>	<i>p</i> ^c	95% CI	
					<i>LL</i>	<i>UL</i>
(intercept)	5.45	0.10	55.05	< .001	5.26	5.65
Provoked ^d	-0.38	0.10	-4.01	< .001*	-0.57	-0.19
Perp Race ^e	-0.08	0.10	-0.80	.423	-0.26	0.11
Victim Race ^f	0.17	0.10	1.76	.079	-0.02	0.35
TESR ^g	-0.02	0.01	-3.53	< .001*	-0.03	-0.01
Victim Race*TESR ^h	-0.00	0.01	-0.15	.885	-0.02	0.01

Note. $R^2 = .09$. a = unstandardized beta. b = standard error of unstandardized beta. c = Bonferroni adjusted p-value = .01, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988).

* $p < .01$

Table 10

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Incident Seriousness (with Control Variable of Racial Bias)

Effect	Estimate ^a	SE ^b	<i>t</i>	<i>p</i> ^c	95% CI	
					<i>LL</i>	<i>UL</i>
(intercept)	5.48	0.10	55.88	< .001	5.29	5.67
Provoked ^d	-0.37	0.09	-3.96	< .001*	-0.55	-0.19
Perp Race ^e	-0.09	0.09	-0.97	.325	-0.28	0.09
Victim Race ^f	0.13	0.09	1.32	.186	-0.06	0.31
TESR ^g	-0.01	0.01	-1.92	.056	-0.02	0.00
Victim Race*TESR ^h	0.00	0.01	-0.07	.943	-0.01	0.01
CoBRAS ⁱ	-0.02	0.01	-3.74	< .001*	-0.03	-0.01

Note. $R^2 = .11$. a = unstandardized beta. b = standard error of unstandardized beta. c = Bonferroni adjusted p-value = .008, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). i = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000).

* $p < .008$

overall model remained significant, ($F(6, 504) = 11.59, p < .001, R^2 = .11$), and there was a minimal increase in total explained variability ($\Delta R^2 = .02$). Racial bias (CoBRAS) was also a significant predictor of incident seriousness ($b = -0.02, t = -3.74, p < .001, \eta_p^2 = .02$), withstanding the adjusted Bonferroni p-value of .008 (Table 10).

In terms of perpetrator blame, there was a collective significant effect between provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology in the model without the control variable, ($F(5, 505) = 27.83, p < .001, R^2 = .18$). When the control variable of racial bias was added, the overall model remained significant, ($F(6, 504) = 25.20, p < .001, R^2 = .20$), and there was a minimal increase in total explained variability ($\Delta R^2 = .02$). Racial bias (CoBRAS) was also a significant predictor of perpetrator blame ($b = -0.02, t = -3.18, p < .001, \eta_p^2 = .02$), given the adjusted Bonferroni p-value of .008 (Table 12).

Regarding victim blame, results of the model without the control variable demonstrated a collective significant effect between provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology, ($F(5, 505) = 67.30, p < .001, R^2 = .33$). When the control variable of racial bias was added, the overall model remained significant, ($F(6, 504) = 56.73, p < .001, R^2 = .33$), but there was no change in total explained variability ($\Delta R^2 = 0$). Racial bias (CoBRAS) was not a significant predictor of victim blame ($p = .09$; Table 14).

H1: Effect of Perpetrator Race and Victim Race on Perceptions of Seriousness, Perpetrator Blame, and Victim Blame

Hypothesis 1 predicted that no significant effects of perpetrator race (Black vs. White) or victim race (Black vs. White) would be observed in the perception models of incident seriousness, perpetrator blame, and victim blame. Predictors provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology were entered in each perception

model. As hypothesized, no significant effect of perpetrator race was observed in the models of seriousness (Table 9, 10), perpetrator blame (Table 11, 12), or victim blame (Table 13, 14), regardless of if the control variable of racial bias (CoBRAS) was included. Similarly, no significant effect of victim race was observed in any model, regardless of if the control variable of racial bias was included.

Perpetrator race was initially revealed as a small but significant predictor in the model of perpetrator blame without the control variable ($b = -0.22$, $t = -2.23$, $p = .025$), indicating that perpetrators were blamed 0.22 units less on the 7-point Likert scale when the perpetrator was Black, compared to White (Table 11). However, this effect became non-significant given the adjusted Bonferroni p-value of .01 per test (.05/5). Results were virtually identical with the inclusion of the control variable ($b = -0.23$, $t = -2.40$, $p = .017$; Table 12); though, again, the effect became non-significant given the adjusted Bonferroni p-value of .008 per test (.05/6).

H2: Effect of Sex Role Ideology on Perceptions of Incident Seriousness, Perpetrator Blame, and Victim Blame

Hypothesis 2 predicted significant effects of sex role ideology on perceptions of incident seriousness, perpetrator blame, and victim blame; specifically, as sex role ideology scores increased (i.e., towards more traditional ideology; TESR, Larsen & Long, 1988), perceptions of seriousness and perpetrator blame would decrease, and victim blame would increase. Predictors provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology were entered in each perception model. Racial bias (CoBRAS; Neville et al., 2000) was also used as a control variable as it was significantly correlated with the dependent variables of incident seriousness, perpetrator blame, and victim blame, and was revealed to be a significant predictor of all perception models in exploratory analyses (Table 6-8). Results will first be presented

Table 11

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Perpetrator Blame (without Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	6.28	0.09	67.77	< .001	6.09	6.45
Provoked ^d	-0.89	0.10	-8.97	< .001*	-1.08	-0.70
Perp Race ^e	-0.22	0.10	-2.23	.027	-0.41	-0.03
Victim Race ^f	0.17	0.10	1.70	.089	-0.03	0.36
TESR ^g	-0.02	0.00	-2.73	.007*	-0.03	-0.01
Victim Race*TESR ^h	-0.00	0.01	-0.15	.882	-0.02	0.02

Note. $R^2 = .18$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .01, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988).

* $p < .01$

Table 12

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Perpetrator Blame (with Control Variable of Racial Bias)

Effect	Estimate ^a	Robust SE ^b	<i>t</i>	<i>p</i> ^c	95% CI	
					<i>LL</i>	<i>UL</i>
(intercept)	6.29	0.09	68.06	< .001	6.12	6.48
Provoked ^d	-0.88	0.10	-8.97	< .001*	-1.07	-0.69
Perp Race ^e	-0.23	0.10	-2.40	.017	-0.43	-0.04
Victim Race ^f	0.13	0.10	1.32	.189	-0.07	0.33
TESR ^g	-0.01	0.01	-1.65	.099	-0.03	0.00
Victim	-0.00	0.01	-0.10	.920	-0.02	0.02
Race*TESR ^h						
CoBRAS ⁱ	-0.02	0.01	-3.16	.002*	-0.03	-0.01

Note. $R^2 = .20$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .008, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). i = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000).

* $p < .008$

without the control variable of racial bias (Table 9, 11, 13), then with the control variable (Table 10, 12, 14), to demonstrate the changes in the variable of sex role ideology.

In the models without the control variable of racial bias, sex role ideology was a significant predictor of incident seriousness ($b = -0.02$, $t = -3.53$, $p < .001$; Table 9) and perpetrator blame ($b = -0.02$, $t = -2.73$, $p = .007$; Table 11), though both effect sizes were small ($\eta_p^2 = .02$). This indicates that for every 1-unit increase above the mean on the sex role ideology scale (TESR; Larsen & Long, 1988), moving towards more traditional orientation, ratings of seriousness and perpetrator blame both decreased by 0.02 on the respective 7-point Likert scales. Sex role ideology was initially thought to be a significant predictor of victim blame ($b = 0.02$, $t = 2.32$, $p = .02$; Table 13), though this effect was non-significant given the adjusted Bonferroni p -value of .01 per test (.05/5).

When the control variable of racial bias (CoBRAS) was added to the models, sex role ideology was non-significant in the model of seriousness ($p = .056$; Table 10), perpetrator blame ($p = .099$; Table 12), and victim blame ($p = .087$; Table 14). Interestingly, sex role ideology was the only predictor variable to be impacted by the inclusion of the control variable (i.e., change in coefficient estimates, significance), whereas all other predictors remained predominantly unchanged. Altogether, H2 was not supported when the models included the control variable of racial bias.

H3: Interaction Effect of Victim Race and Sex Role Ideology on Perceptions of Seriousness, Perpetrator Blame, and Victim Blame

Hypothesis 3 predicted that a significant interaction between victim race (Black vs. White) and sex role ideology would occur in the models of incident seriousness and perpetrator blame. Specifically, participants with more traditional orientation (i.e., higher TESR scores)

would rate scenarios with a Black victim as less serious and attribute less blame to the perpetrator, compared to situations with a White victim, whereas participants with more egalitarian orientation (i.e., lower TESR scores) would rate scenarios as equally serious and attribute similar blame, regardless of victim race. A non-significant interaction between sex role ideology and victim race was hypothesized on perceptions of victim blame.

Predictors provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology were entered in each perception model. Results indicated that, regardless of the inclusion or exclusion of the control variable of racial bias (CoBRAS; Neville et al., 2000), the interaction between victim race and sex role ideology was non-significant in the models of incident seriousness (Table 9, 10), perpetrator blame (Table 11, 12), and victim blame (Table 13, 14). Taken together, findings partially supported hypothesis 3. The non-significant interactions between sex role ideology and victim race across all models is consistent with the victim blame model hypothesis, but contrasts the seriousness and perpetrator blame hypotheses.

H4: Effect of Provocation on Perceptions of Seriousness, Perpetrator Blame, and Victim Blame

Hypothesis 4 predicted that conditions with victim provocation would be rated as more serious, more blame would be attributed to the perpetrator, and less to the victim, compared to conditions without victim provocation. Predictors provocation, perpetrator race, victim race, sex role ideology, and victim race*sex role ideology were entered in each perception model. Results will first be presented for models without the control variable of racial bias (CoBRAS; Neville et al., 2000), then with the control variable. All coefficient estimates reported for individual predictors are raw/unstandardized (*b*).

In the models without the control variable, provocation was a significant predictor of

Table 13

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Victim Blame (without Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	1.74	0.10	17.45	< .001	1.55	1.94
Provoked ^d	1.55	0.11	14.90	< .001*	1.34	1.75
Perp Race ^e	0.08	0.11	0.72	.469	-0.13	0.27
Victim Race ^f	-0.21	0.11	-1.95	.051	-0.41	0.00
TESR ^g	0.02	0.01	2.32	.021	0.00	0.03
Victim Race*TESR ^h	0.00	0.01	0.35	.729	-0.02	0.02

Note. $R^2 = .33$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .01, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). * $p < .01$

Table 14

Provocation, Perpetrator Race, Victim Race, and Sex Role Ideology Regressed on Ratings of Victim Blame (with Control Variable of Racial Bias)

Effect	Estimate ^a	Robust <i>SE</i> ^b	<i>t</i>	<i>p</i> ^c	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
(intercept)	1.73	0.10	17.15	< .001	1.53	1.93
Provoked ^d	1.54	0.10	14.90	< .001*	1.34	1.74
Perp Race ^e	0.08	0.11	0.81	.421	-0.12	0.29
Victim Race ^f	-0.18	0.11	-1.72	.086	-0.39	0.03
TESR ^g	0.01	0.01	1.72	.087	-0.00	0.03
Victim Race*TESR ^h	0.00	0.01	0.32	.747	-0.02	0.02
CoBRAS ⁱ	0.01	0.01	1.67	.096	-0.00	0.02

Note. $R^2 = .33$. a = unstandardized beta. b = HC3 corrected robust standard error of unstandardized beta. c = Bonferroni adjusted p-value = .008, significance will only be flagged at this value. d = provocation condition. e = Black perpetrator race condition. f = Black victim race condition. g = Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). h = interaction term between Black victim race condition and Traditional and Egalitarian Sex Role Inventory (mean centered; Larsen & Long, 1988). i = Color-Blind Racial Attitudes Scale (mean centered; Neville et al., 2000).

* $p < .008$

seriousness scores ($b = -0.38, t = -4.01, p < .001$; Table 9), perpetrator blame scores ($b = -0.89, t = -8.97, p < .001$; Table 11), and victim blame scores ($b = 1.55, t = 14.90, p < .001$; Table 13). All effects of provocation remained significant given the adjusted Bonferroni p-value of .01 per test (.05/5). This indicated that, when vignettes included victim provocation, ratings of seriousness decreased by 0.38, perpetrator blame decreased by 0.89 and victim blame increased by 1.55 on the respective 7-point Likert scales, compared to vignettes without victim provocation. Effect sizes were small in terms of seriousness ($\eta_p^2 = .03$), though larger in the model of perpetrator blame ($\eta_p^2 = .14$), and largest in the model of victim blame ($\eta_p^2 = .31$). Notably, provocation accounted for 31% of the explained variance in the model of victim blame; this is double that of what provocation explained in the model of perpetrator blame, and 10x more than in the model of seriousness.

When the models included the control variable of racial bias (CoBRAS), results were virtually identical; all p-values and effect sizes were identical and very minimal changes occurred in coefficient estimates ($\Delta b = 0.00-0.01$). Provocation remained a significant predictor of seriousness ($b = -0.37, t = -3.96, p < .001$; Table 10), perpetrator blame ($b = -0.88, t = -8.97, p < .001$; Table 12), and victim blame ($b = 1.55, t = 14.90, p < .001$; Table 14), given the adjusted Bonferroni p-value of .008 per test (.05/6). Altogether, results supported hypothesis 4.

3.5 Exploratory Qualitative Analyses: Justifications for Ratings

To further examine participant reasoning behind their ratings of seriousness and blame, open-ended responses were analyzed (Table 15). Participants were asked, “Do you think the incident was serious in nature? Why or why not?”, “Who do you think is to blame for the incident? Why?”, and “What did you think of the incident in general?” Responses were coded

separately for participants in the provocation and non-provocation conditions as the main quantitative differences in perceptions of seriousness and blame occurred between those groups.

An inductive approach to qualitative analysis was used, which allows the data itself to determine the themes (Boyatzis, 1998). The following steps were used for thematic analysis (Braun & Clarke, 2006): familiarization (i.e., reading through all responses, taking initial notes, familiarizing self with data), coding (i.e., ideas/feelings expressed in the text), and generating themes (i.e., identify patterns among codes, consolidate into broader categories). After themes were identified, all responses were re-reviewed. In responses to the third question pertaining to general thoughts, almost all participants gave vague, one-word answers (e.g., “bad”), or restated their blame attribution (e.g., “her fault”). As such, responses were not able to be coded.

Seriousness

Responses to the first question were coded for mention of seriousness (serious, not serious). Responses coded as “not serious” were further coded for two emergent themes: isolated incident (present, absent) and lack of injury (present, absent). As all responses coded as “serious” mentioned general violence and/or verbal aggression as reasoning for their rating, no further coding took place.

The vast majority of participants mentioned the incident was serious in both the provocation (90.7%) and non-provocation (92.1%) conditions (Table 15). Between conditions, participants similarly cited the use of physical and/or verbal aggression as their justification for the incident to be considered serious; in particular, the girlfriend’s statement that “it will sting harder next time”. Among participants in either condition who stated that the incident was not serious, 54.5% mentioned a lack of injury, while 38.6% mentioned that the incident was not serious if it was an isolated event. For example, “Although there was physical violence, I do not

believe the incident was serious in nature as no one was truly harmed. The boyfriend might have a small mark but he was not in a lot of danger.” Another participant wrote, “I don't think this specific isolated incident is proof enough that it is a recurring thing despite what the girlfriend said.” Interestingly, all participants who wrote-in that the incident was not serious either reported previous IPV history (CTS2; Straus et al., 1996) and/or above average scores of childhood abuse (CTQ; Bernstein & Fink, 1998).

Blame Attributions

Responses to the second question were coded for blame attributions (both, perpetrator only, victim only). As suspected victim infidelity emerged as a theme within blame attributions, responses were further coded for mention of infidelity (present, absent). In the provocation condition, 51.4% said both were to blame, 39.0% perpetrator only and 9.6% victim only. Like justifications for seriousness, participants predominantly mentioned the girlfriend's use of physical violence/aggression and the boyfriend's use of verbal aggression for their attributions of blame. In comparison, almost all blame attributions in the non-provocation condition were solely to the perpetrator (94.8%; 4.4% both, 0.8% victim only), with the vast majority of participants mentioning her use of violence/aggression and his lack thereof. Concerning infidelity, similar proportions of participants mentioned cheating or suspected infidelity in both the provocation (18.9%) and non-provocation (16.7%) conditions. For example, a participant in the provocation condition wrote, “the girl was just upset and probably assumed he was cheating. It is very rare she always acts like this”.

Table 15

Qualitative Coding of Participant Justifications for Ratings in the Total Sample and as a Function of Provocation

	Non-Provocation (<i>n</i> = 252)		Provocation (<i>n</i> = 259)		Total (<i>N</i> = 511)	
	Frequency	%	Frequency	%	Frequency	%
Seriousness^a						
Serious	232	92.1	235	90.7	467	91.4
Not serious	20	7.9	24	9.3	44	8.6
Isolated ^b	5	25.0	12	50.0	17	38.6
Injury ^c	14	70.0	10	41.7	24	54.5
Blame						
Attribution^d						
Both	11	4.4	133	51.4	144	28.2
Perpetrator	239	94.8	101	39.0	340	66.5
Victim	2	0.8	25	9.6	27	5.3
Infidelity^e						
Present	42	16.7	49	18.9	91	17.8
Absent	210	83.3	210	81.1	420	82.2

Note. a = coded responses to questioning pertaining to incident seriousness. b = mention of an isolated incident as justification for “not serious”. c = mention of lack of injury as justification for “not serious”. d = coded responses to question pertaining to blame attributions. e = mentions of victim infidelity within attribution of blame responses.

Chapter 4: Discussion

The term IPV encompasses a wide range of relationship violence, including physical, sexual, and psychological violence (Royal Canadian Mounted Police, 2019). Over the past 20 years, the IPV perception literature has predominantly focused on differences of the sex dyad, assessing observer perceptions of seriousness and attributions of blame across scenarios of male and female perpetrated IPV. Less is known, however, about the additional influence of factors such as victim provocation and perpetrator/victim race on perceptions of IPV, especially in the context of female perpetration. As public opinion can be a powerful motive for the development and availability of victim resources, gaining a better understanding of observer perceptions of female perpetrated IPV is critical. Perception research among undergraduate samples, specifically, is key as both men and women aged 15–24 are at highest risk for IPV victimization (Survey of Safety in Public and Private Spaces, 2018).

The main purpose of the current study was to assess how an observer's own ideological beliefs (i.e., sex roles, race biases, sex roles by race) influenced their perceptions of female perpetrated IPV. Specifically, the influence of both perpetrator and victim race (H1), sex role ideology (H2, H3), and the presence of victim provocation (H4) on observer perceptions of female perpetrated IPV. Three types of observer perceptions were examined: incident seriousness, perpetrator blame, and victim blame. Participants were randomly assigned to one of eight conditions wherein victim provocation (present, absent), perpetrator race (Black, White), and victim race (Black, White) were varied. Victim provocation was revealed to be the most significant predictor across all perception models, accounting for 31% of the explained variance in the model of victim blame and 14% of the variance in the model of perpetrator blame. Interestingly, no significant effects of perpetrator or victim race were observed in any model. Sex

role ideology (TESR; Larsen & Long, 1988) was also expected to be a strong predictor of seriousness and attributions of blame, though effects became non-significant once the control variable of racial bias (CoBRAS; Neville et al., 2000) was added to the models.

It is important to reiterate that the term “victim”, rather than “survivor”, will be used throughout the discussion. Victim terminology is used in legal and criminal justice contexts, whereas “survivor” may be used in the community as a term of empowerment. Using the term “victim” in the current study is in no way meant to imply weakness or assign blame; it is simply used to convey that a potential criminal act has been perpetrated against this person.

4.1 Perpetrator and Victim Race (H1)

It was first hypothesized that the perpetrator’s race (Black vs. White) and the victim’s race (Black vs. White) would not significantly predict observer perceptions in models of incident seriousness, perpetrator blame, or victim blame. Provocation (present, absent), perpetrator race, victim race, sex role ideology (TESR; Larsen & Long, 1988), and victim race*sex role ideology variables were entered in each perception model. All three models were then run once more with the inclusion of the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) as a control variable of racial bias. A total of six analyses were therefore conducted to test H1. Hypotheses were supported across all 6 analyses; no significant effects of perpetrator or victim race (Black vs. White) were observed in any model. Though, initially, a small but significant effect of perpetrator race (Black vs. White) was observed in the model of perpetrator blame, both with and without the control variable of racial bias (CoBRAS), this effect became non-significant given the Bonferroni adjusted p-value for multiple comparisons ($.05/6 = .008$).

Past studies in which significant effects of perpetrator/victim race (i.e., Black vs. White) were observed used materials depicting male-to-female scenarios of rape (George & Martinez,

2002), heightened physical assault (i.e., pushing to ground, repeated face punching; Locke & Richman, 1999; shoving with definite injury; Rubenstein, 2016), where police were called to the scene (Esqueda & Harrison, 2005), or the physical assault was serious enough to be tried in court (Willis et al., 1996). Significant effects of perpetrator race (Black vs. White) in female-to-male IPV have been observed in a mock jury study; though, in that scenario, a murder was committed (Mossiere et al., 2018). Comparatively, the current study used a low intensity female-to-male IPV vignette in which a single slap occurs. Due to the low intensity, it was anticipated that Black racial stereotypes, which may have contributed to past findings, may not have been similarly activated in the current study. Specifically, negative racial stereotypes concerning aggression and/or criminality of Black males and females (e.g., Dixon & Maddox, 2005; Powell, 2008). It is also possible that low levels of racial bias (CoBRAS; Neville et al., 2000) observed in the sample contributed to the non-significant findings. Perhaps significant effects of perpetrator/victim race would have been observed across perception models of seriousness and attributions of blame in the current study given a sample with greater skepticism of Black-White racial issues in Canada (i.e., higher CoBRAS scores) or more explicit endorsement of anti-Black attitudes.

Moreover, the non-significant effects of perpetrator/victim race (Black vs. White) in models of seriousness, perpetrator blame, and victim blame may be attributed to other factors presented in the vignette. Perpetrator/victim race may not have been significant predictors of perpetrator blame or victim blame because another factor, victim provocation, was more influential to observers and thus took precedence when giving ratings. Correlation matrices (Table 2) indicated significant associations between provocation and perpetrator/victim blame variables, whereas very weak correlations were observed between perpetrator/victim race and perpetrator/victim blame variables. These associations further support that, when giving ratings

of perpetrator and victim blame, observers may have been more heavily influenced by the presence of victim provocation rather than perpetrator/victim race. This notion was also echoed in open-ended responses. In the provocation condition, most participants attributed all (10%) or partial (51%) blame to the victim because he engaged in verbal provocation prior to the incident. In contrast, almost all participants in the non-provocation condition attributed sole blame to the perpetrator (94%).

Perpetrator and victim race may not have been significant predictors of incident seriousness as perceptions of the act itself (i.e., a single slap) may have instead been the driving factor. Specifically, it can be posited that participants rated incident seriousness as a function of whether they viewed a female-to-male slap as serious. This was evident in open-ended responses. When asked about incident seriousness, all responses similarly mentioned the slap itself, or more generally physical violence. For example, one participant wrote, “Yes any sort of violence is serious”, whereas another wrote, “Not very serious, no. The described event was only a single slap.” To add, very weak, non-significant correlations were also observed between seriousness and perpetrator/victim race variables, further supporting that an alternative factor (i.e., perceptions of the slap itself) may better explain observer ratings of seriousness.

Taken together, results supported hypothesis 1 that perpetrator race and victim race (Black vs. White) would not significantly predict perceptions of seriousness, perpetrator blame, or victim blame. Results may be attributed to the low intensity IPV situation portrayed in the vignette (i.e., a single slap) or the low levels of racial bias (CoBRAS; Neville et al., 2000) reported by the sample. Though, it is also likely that victim provocation was more influential than perpetrator/victim race when providing blame ratings. Similarly, when rating incident

seriousness, perceptions of the slap itself may have been more influential to observers than perpetrator/victim race.

4.2 Sex Role Ideology (H2)

A measure of traditional-egalitarian sex role ideology (TESR; Larsen & Long, 1988), rather than participant sex, was used in analyses. Sex role ideology constitutes a broader set of beliefs about how men and women are to act, including agreement or disagreement with stereotypical portrayals (see Wolsko et al. 2000). As a number of participants indicated they were non-binary ($n = 19$), using sex role ideology in place of participant sex allowed for a more inclusive approach. Additionally, amid mixed results of sex differences in the IPV perception literature, it has been proposed that sex role beliefs may instead be a more accurate reflection of these differences (Black & McCloskey, 2013).

Overall, the current sample demonstrated high sex role egalitarianism. This is unsurprising as being female (74% of the sample) and having higher education have been associated with increased sex role egalitarianism (Chatard & Selimbegovic, 2007; Larsen & Long, 1988). Compared to traditionalists, sex role egalitarians are said to hold more liberal views of sex roles, wherein equal roles and responsibilities among men and women are supported (Davis & Greenstein, 2009). Sex role egalitarianism has also been associated with more liberal views of racial issues, whereas traditionalism has been previously correlated with prejudice against Black Americans (Biernat et al., 1996; Hoover & Fishbein, 1999).

Hypothesis 2 predicted that participants endorsing greater sex role egalitarianism (i.e., lower TERS scores; Larsen & Long, 1988) would perceive incidents as more serious, attribute more blame to the perpetrator, and less blame to the victim, as compared to those with more traditional orientation (i.e., higher TERS scores). As noted, provocation (present, absent),

perpetrator race (Black vs. White), victim race (Black vs. White), sex role ideology, and victim race*sex role ideology variables were entered in each perception model. All models were then run once more with the inclusion of the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) as a control variable of racial bias. A total of six analyses were therefore conducted to test H2.

In the models without the control variable of racial bias (CoBRAS), results partially supported hypotheses; increases in sex role ideology scores (i.e., towards more traditional orientation; TESR) were significantly predictive of lower ratings of seriousness and perpetrator blame. Though effect sizes were small and it is possible they occurred due to chance, such significant findings nonetheless add to the large body of literature supporting that individuals endorsing more traditional sex role orientation perceive IPV incidents as less serious and attribute less blame to the perpetrator, compared to those with more egalitarian orientation (e.g., Angelone et al., 2012; Black & McCloskey, 2013; Esqueda & Harrison, 2005; Willis et al., 1996; Seelau & Seelau, 2005; Stewart et al., 2012). It should also be noted that sex role ideology was initially thought to be significant predictor of victim blame, suggesting that as sex role ideology increased, so did victim blame scores, however this effect became non-significant given Bonferroni p-value adjustments for multiple comparisons.

Interestingly, when the control variable of racial bias (CoBRAS; Neville et al., 2000) was added, sex role ideology was non-significant in all models (regardless of Bonferroni adjustments). Instead, the control variable of racial bias was found to be a small but significant predictor of incident seriousness and perpetrator blame; neither sex role ideology nor racial bias were significant in the model of victim blame. Such results may be attributed to the relationship between the measures of sex role ideology (TESR) and racial bias (CoBRAS). Specifically, sex

role ideology may have become non-significant when racial bias was added to the models because the unique variance it was previously accounting for, was now being shared. This notion is supported by the significant correlation observed between the measures of sex role ideology and racial bias ($r = .52$); when sex role ideology increased towards more traditional orientation, racial bias also increased. Moreover, both sex role ideology (TESR) and racial bias (CoBRAS) were significantly correlated with the dependent variables of incident seriousness, perpetrator blame, and victim blame, and demonstrated very similar correlation coefficients to each dependent variable, respectively ($\Delta r = .01-.03$; Table 2).

It is also possible that the significant effects of sex role ideology observed in previous studies were augmented by the absence of perpetrator/victim race manipulations and/or racial bias measures. Indeed, eight of the ten identified studies in which significant effects of sex role ideology were reported had either manipulated perpetrator/victim sex or incident severity, rather than perpetrator/victim race (Abrams et al., 2003; Angelone et al., 2012; Black & McCloskey, 2013; Erickson et al., 2017; Little & Terrance, 2010; Seelau et al., 2003; Seelau & Seelau, 2005; Stewart et al., 2012). The remaining two studies in which perpetrator/victim race (Black, White) and sex role ideology were jointly assessed did not include a measure of racial bias (Esqueda & Harrison, 2005; Willis et al., 1996). In fact, Esqueda and Harrison (2005) used the measure of sex role ideology (TESR; Larsen & Long, 1988) to inform their perpetrator/victim race-related hypotheses.

Altogether, results do not support hypotheses that sex role ideology (TESR) would significantly predict perception ratings of seriousness, perpetrator blame, and victim blame, while controlling for racial bias (CoBRAS). As moderate correlations were observed between the measures of sex role ideology (TESR) and racial bias (CoBRAS), shared variance may have

contributed to sex role ideology becoming non-significant when racial bias was added to the models. Though, more research is needed to evaluate the true nature of this relationship on perceptions of IPV, as the identified past studies in which effects of sex role ideology were significant did not jointly include a measure of racial bias.

4.3 Sex Role Ideology and Victim Race (H3)

As noted, sex role egalitarianism has been previously associated with more liberal views of racial issues (Biernat et al., 1996). Past research has demonstrated interactions of sex role ideology and female victim race (Black vs. White) on perceptions of abusiveness and perpetrator sentencing. Those with egalitarian orientation were more likely to rate an incident with a Black female victim as abusive and recommend a lesser sentence for the perpetrator, compared to traditionalists. When the victim was White, no such differences were observed on abusiveness, though traditionalists recommended a longer sentence than egalitarians (Willis et al., 1996).

The current study hypothesized that perceptions of abusiveness and perpetrator sentence recommendations observed by Willis et al. may apply to ratings of seriousness and perpetrator blame, respectively, in the context of the current study. Specifically, hypothesis 3 predicted that participants with more traditional orientation (i.e., higher TESR scores; Larsen & Long, 1988) would rate scenarios with a Black victim as less serious and blame the perpetrator less, compared to situations with a White victim, whereas participants with more egalitarian orientation (i.e., lower TESR scores) would rate scenarios as equally serious and attribute similar blame to the perpetrator. In terms of victim blame, a non-significant interaction was anticipated as was observed by Willis et al. on the factor concerning victim responsibility.

Like the evaluation of H1 and H2, provocation (present, absent), perpetrator race (Black vs. White), victim race (Black vs. White), sex role ideology, and victim race*sex role ideology

variables were entered in models of incident seriousness, perpetrator blame, and victim blame. All models were then run once more with the inclusion of the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) as a control variable of racial bias. A total of six analyses were therefore conducted to test H3. No significant interaction between victim race and sex role ideology was observed in any of the six perception models.

Methodological differences between past research and the current study may have contributed to the non-significant findings. Despite using the same measure of sex role ideology (TESR; Larsen & Long, 1988), Willis et al. (1996) conducted a median split prior to analyses so that ANOVA could be used to assess perception differences between egalitarian and traditionalist groups. This contrasts the methodology of the current study, which retained the continuous nature of the TESR measure and conducted regression analyses. It need be noted that the Likert direction of the TESR measure was reversed for use in the current study (i.e., lower scores now reflect egalitarianism); for clarity, this direction will also be used to discuss TESR findings of past studies.

Conducting a median split on the measure of sex role ideology (TESR) presents many issues. First, median splits are sample-dependent and thus no theoretical rationale is used to substantiate such a cut-point. Median splits also introduce random error in the measure and reduces statistical power (McClelland et al., 2015). Second, as sex role egalitarianism has been associated with more liberal views of racial issues, even by the scale creators themselves (Larsen & Long, 1988), using a median split when assessing interactions with race variables poses additional issues. Third, by Willis et al. conducting a median split at such an extreme end of the scale ($Mdn = 35$; plausible range: 20–140), the subsequent groups do not depict what are suggested as egalitarians ($M = 27$) and traditionalists ($M = 50$). It is not possible to have a

comparable traditionalist group given a sample with such high overall egalitarian orientation. Thus, it is misleading to label differences between such artificially categorized groups as comparisons between egalitarians and traditionalists.

The same median split methodology was also used on the measure of sex role ideology (TESR; Larsen & Long, 1988) by Esqueda and Harrison (2005) when assessing the effects of couple race (Black couple vs. White couple) on IPV perceptions. Again, the median (40; plausible range 20–140) indicated a highly egalitarian sample; however, groups were still referred to as egalitarian ($M = 30$) and traditionalist ($M = 59$). Notably, the traditionalist group fell short of even the scale midpoint. A similar interaction between categorical sex role ideology and couple race (Black couple vs. White couple) was then reported. Egalitarians were more likely to find the Black couple truthful, and traditionalists were more likely to find the White couple truthful.

Taken together, H3 was partially supported by results. The interaction between victim race (Black vs. White) and sex role ideology (TESR) was non-significant across all perception models; this contrasts the significant effects anticipated in the models of seriousness and perpetrator blame. Non-significant interactions may be attributed to methodological differences. Past studies in which significant interactions were observed, artificially dichotomized the measure of sex role ideology (TESR) using a median split (Esqueda & Harrison, 2005; Willis et al., 1996). Specifically, as median splits occurred on the highly egalitarian end of the scale in both studies, a comparable traditionalist group was not possible given either sample. Significant interactions may not have been observed in past studies if the measure of sex role ideology remained continuous, especially as significant interactions were not observed in the current study given a highly egalitarian sample.

4.4 Victim Provocation (H4)

The fourth and final hypothesis predicted that scenarios with victim provocation would be rated as more serious, with less blame being attributed to the perpetrator and more blame being attributed to the victim, compared to scenarios without victim provocation. Like evaluations of hypotheses 1–3, provocation (present, absent), perpetrator race (Black vs. White), victim race (Black vs. White), sex role ideology, and victim race*sex role ideology variables were entered in models of incident seriousness, perpetrator blame, and victim blame. All models were then run once more with the inclusion of the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) as a control variable of racial bias. Hypothesis 4 was supported in the models of perpetrator blame and victim blame; provocation was also a significant predictor of seriousness, albeit in the opposite direction than hypothesized. Interestingly, effects of victim provocation were virtually identical regardless of the presence of the control variable.

In terms of seriousness, it was initially thought that conditions with victim provocation would be perceived as more serious because both parties aggressed against each other (verbal/physical abuse), thus heightening the situational intensity, compared to situations without provocation. However, results indicated the opposite effect; rather, scenarios with victim provocation were predictive of lower seriousness ratings, compared to scenarios without provocation. Perhaps participants instead viewed the mutual aggression in the provocation condition as a pattern in their relationship, or something the couple often did to communicate, thus causing seriousness ratings to be lower. This was supported in some open-ended responses. For example, one participant in the provocation condition wrote, “I think it wasn't [serious] just because they are both adults and choose to stay together and behave this way.” Similarly, it is possible that participants viewed situations without provocation as one-sided, and thus

seriousness ratings were higher because there was a clear perpetrator and clear victim. Although hypothesis 4 was not supported in terms of seriousness, it contributes valuable evidence to the IPV perception literature; identified past studies in which provocation was manipulated did not assess perceptions of seriousness (e.g., Rhatigan et al., 2011).

Concerning perpetrator and victim blame, results were consistent with hypotheses in that the perpetrator was blamed significantly less in situations with provocation than without, and the victim was blamed more. Notably, the effect sizes of provocation were substantial; provocation explained 14% in the model of perpetrator blame and 31% of the variance in the model of victim blame. The magnitude of these effects speaks to how influential the presence (or absence) of victim provocation is when observers assign blame in scenarios of IPV. Such findings were also echoed in open-ended responses. Among those in the provocation condition, approximately half attributed blame to both the perpetrator and victim (vs 39% perpetrator only, 10% victim only), whereas nearly all participants (94%) in the non-provocation condition attributed sole blame to the perpetrator (4% both, 1% victim only). Results support the large body of existing evidence demonstrating that perpetrators of IPV are blamed less, and victims are blamed more, when incidents involve provocation compared to without (Esqueda & Harrison, 2005; Kristiansen & Giulietti, 1990; Rhatigan et al., 2011; Sorenson & Taylor, 2005; Stewart et al., 2012; Witte et al., 2006). Findings also contribute to the smaller body of literature concerning victim provocation, perpetrator blame, and victim blame in the context of female perpetrated IPV (Rhatigan et al., 2011).

The effect of provocation on perceptions of perpetrator and victim blame may be attributed to just world ideology, in that participants may have endorsed the mentality of “people get what they deserve” (Lerner, 1980) when presented with victim provocation prior to IPV. This

was directly stated in an open-ended response by a participant in the provocation condition, “Her [to blame] for hitting him but he seems to have deserved it”. Another wrote, “I believe the boyfriend is responsible for the incident, due to the violation nature of his provocation, in relation to the girlfriend’s statement”.

Another notable open-ended finding pertained to suspected victim infidelity and blame attributions. Similar proportions of participants in the provocation and non-provocation conditions mentioned cheating or infidelity at least once in their responses (19%, 17%, respectively); however, suspected infidelity was perceived very differently when provocation was used vs not. In the provocation condition, the mention of victim infidelity was often used as justification for the perpetrator to slap the victim, even if the participant stated they were both to blame. To illustrate, “Her hitting him across the face was her physical reaction to him betraying her”. In contrast, among those in the non-provocation condition, almost all mentions of victim infidelity were framed in defence of the victim. For example, “The boyfriend's relationship to the other woman on the phone has not been identified with certainty, and even if he had been unfaithful, he is not to blame for her violence.” A few participants also used the suspected infidelity as an external attribution to justify the perpetrators use of violence: “the girl was just upset and probably assumed he was cheating. It is very rare she always acts like this”.

Similarities can be drawn to both real-world and experimental evidence. In the real-world case of Jodi Arias, participants searched for external attributions as to why she perpetrated IPV, such as jealousy of her ex-boyfriend’s new relationship. Experimental IPV perception research among college students also found that participants endorsed that it was far more common for typical male college students or their male friends to aggress against their girlfriend when she was unfaithful as compared to faithful (Witte & Mulla, 2012).

Altogether, results supported hypothesis 4; provocation was a significant predictor of perpetrator blame and victim blame. Provocation was also a significant predictor of incident seriousness, albeit in the opposite direction than anticipated. Notably, victim provocation explained a significant amount of variation in the models of victim blame (31%) and perpetrator blame (14%). Such findings underline the highly influential effects of victim provocation on observer perceptions of IPV. Open-ended responses also supported that provocation results may be attributed to just world ideology, wherein “people get what they deserve” (Lerner, 1980), and the influence of suspected victim infidelity.

4.5 Exploratory Findings: Observer Perpetration and Victimization History

Observer experiences of childhood abuse (CTQ, Bernstein & Fink, 1998) and IPV perpetration/victimization history (CTS2; Straus et al. 1996) were assessed in exploratory analyses. Two subscales were used to assess childhood abuse (psychological, physical; CTQ), three subscales were used to assess IPV perpetration (Revised Conflict Tactics Scale; CTS2, Straus et al., 1996), and the same three subscales to assess IPV victimization (psychological, physical, injury; CTS2). Correlation matrices (Table 3) revealed strong associations between IPV perpetration and victimization subscales (CTS2), highlighting the mutual nature of IPV amongst partners. Correlations between childhood abuse subscales (CTQ) and IPV victimization subscales (CTS2), may also speak to the effects of social learning theory (Akers, 1998; Sellers et al., 2005). More specifically, early experiences of violence or abuse that are positively reinforced without reprimand (i.e., childhood abuse), may lead an individual to learn that such acts are normal or viewed as an acceptable way of living (i.e., IPV victimization in adulthood). Such findings align with real-world studies; that is, adult female victims of IPV are more likely to

have also reported experiencing childhood abuse (e.g., Coid et al., 2001; Gladstone et al., 2004; Hetzel & McCanne, 2005; Messman-Moore et al., 2009; Rich et al., 2005; Ullman et al., 2009).

In terms of the exploratory regression analyses, the six IPV history subscales (3 perpetration, 3 victimization; CTS2) and two childhood abuse subscales (psychological, physical; CTQ) were added to the models of incident seriousness, perpetrator blame, and victim blame. The control variable of racial bias (CoBRAS; Neville et al., 2000) was also added to the models; its inclusion was warranted as it was significant in all three models. Concerning the models of perpetrator blame and victim blame, no significant effects of the IPV history subscales (CTS2) or childhood abuse subscales (CTQ) were observed. In the model of incident seriousness, however, both the IPV perpetration injury subscale and IPV victimization injury subscale were found significant, accounting for the Bonferroni p-value adjustment. Though, given the small effect sizes, it need be noted that these effects may be due to chance and require replication.

Results indicated that participants who had been injuriously victimized by IPV rated incidents as significantly less serious than participants without a history of IPV injury. This effect aligns with social learning theory (Akers, 1998; Sellers et al., 2005) by way of abuse normalization. Participants who have been previously victimized (presumably severely, as indicated by the injurious subscale) may perceive IPV incidents as less serious, compared to those without such history, because abuse has been reinforced as an acceptable way of living. It is also possible that these participants rated scenarios as less serious because the slap depicted in the vignette may pale in comparison to the IPV they have personally experienced.

Similarly, participants who reported a history of injurious IPV perpetration rated incidents as significantly more serious than participants without such history. Conceptually, this

result is unusual because if it had aligned with abuse normalization by way of social learning theory, perpetrators would have also rated incidents as less serious. It is possible that, since these participants had knowingly perpetrated a serious form of IPV which resulted in injury, overcompensation of seriousness ratings may have been used as a defence mechanism. Adler (1917) first proposed the idea of overcompensation as a defence mechanism due to a person's shortcomings or feelings of inferiority; overcompensation thus alleviates those negative feelings. In this respect, participants may have identified their perpetration of injurious IPV as a personal shortcoming, in which they overcompensated by rating the vignette with very high seriousness. Such overcompensation may have therefore helped mask their shortcomings.

Open-ended responses may also speak to the influence of childhood abuse and IPV history on perceptions of incident seriousness, in lieu of other significant quantitative effects. Although the vast majority (90%) of participants indicated in their open-ended responses that they viewed the incident as serious, similarities were observed among the other 10%. That is, every participant that reported the incident as "not serious" in their open-ended response, also reported that they had either perpetrated or been victimized by IPV on the CTS2 subscales (Straus et al., 1996), and/or reported higher than average childhood abuse (CTQ; Bernstein & Fink, 1998). These participants often cited the victim's lack of physical injury as justification for the scenario not being classified as serious, which may indicate abuse normalization aligning with social learning theory (Akers, 1998; Sellers et al., 2005). Moreover, such findings extend past research which suggested that the physical consequences of IPV determine culpability (Taylor & Sorenson, 2005). For example, one participant wrote, "Although there was physical violence, I do not believe the incident was serious in nature as no one was truly harmed. The

boyfriend might have a small mark but he was not in a lot of danger.” Another wrote, “A slap is a slap, at least he was not beaten, because that would make it serious.”

Taken together, only participants reporting injurious IPV perpetration/victimization histories (CTS2) significantly predicted ratings of incident seriousness. Significant findings of both injurious CTS2 subscales have also been reported by Rhatigan et al. (2011), albeit in the context of perpetrator blame. Concerning non-significant effects, our findings add to the literature of null IPV history and/or childhood abuse effects on perceptions of perpetrator blame (Beyers et al., 2000; Bryant & Spencer, 2003; Rubenstein, 2016). More research is thus needed to assess the effects of IPV history and childhood abuse on perceptions of IPV, specifically perpetrator and victim blame.

4.6 Implications

Public perceptions of IPV have the potential to impact resource allocation, public policy, and help-seeking behaviours. Implications of the current research may speak to such impacts, particularly as it concerns identification of IPV and engagement in victim blaming. Identifying IPV within one’s relationship, or another’s, is the first step in addressing the issue. If not identified, it is unlikely that victims or perpetrators will access the necessary resources or receive assistance, and victims may remain in abusive situations.

Identification of IPV may be dependent on what actions an individual constitutes as IPV. In the current study, participants were twice assessed on their IPV history; first, formally, by the Revised Conflict Tactics Scale (CTS2, Straus et al., 1996), then informally, in the demographic questionnaire. Results of the formal CTS2 assessment demonstrated that 71% of participants had been psychologically victimized by IPV at least once previously, 25% physically victimized, and 8% injuriously victimized. Similarly, 74% had perpetrated psychological IPV at least once

previously, 23% physical, and 12% perpetrated injury. However, when asked informally, 33% of participants reported being victimized by any type of IPV, and 10% reported perpetrating IPV. Perhaps participants did not view psychological aggression by themselves or their partners as an act of IPV when asked informally, and that contributed to the large discrepancies observed between formal and informal IPV assessments. Although participants' reference point of IPV remains unknown, such discrepancies are nonetheless concerning and may speak to the differing views of what constitutes IPV among undergraduate students. Institutions are asked to address the implications of these findings; if students are unable to identify that they are perpetrating IPV, or being victimized by IPV, it is unlikely they will receive assistance. Resources pertaining to warning signs of IPV, identification of IPV, and next steps once IPV is identified are needed, especially as it applies to female perpetration. Particular attention should also be given to psychological IPV, as it may be more difficult to identify than other types (e.g., physical, sexual).

Moreover, the presence of victim provocation was found to be a strong predictor of victim blaming. Participant endorsement of just world ideology as means to blame the victim was also evident in open-ended responses, wherein victims who provoked the perpetrator prior, got "what they deserve" (Lerner, 1980). As these findings may suggest that the prevailing perception among undergraduates is that victims should be blamed for their own victimization if they in any way provoked their partner prior, implications of the current study are troublesome.

Victim blaming is a serious issue; when victims are blamed for their own IPV victimization by the public, it has the potential to impact victim experiences and legal outcomes. Victim blaming may also normalize the use of relationship violence to perpetrators and their victims (e.g., Taylor & Sorenson, 2005), leading observers and/or victims themselves to not

identify a victim as being such. If a victim believes this is the norm, they may be less likely to engage in help-seeking behaviours and remain in an abusive situation (Yamawaki et al., 2012). As individuals aged 15–24 are at highest risk for IPV victimization (SSPPS, 2018), institutions have an obligation to provide resources and other informational tools to address the issue of IPV within this age group. Increasing student awareness of cognitive biases like just world ideology (Lerner & Miller, 1978) may be especially important.

Theory

Early feminist conceptualizations of IPV focused almost exclusively on unilateral violence (i.e., one-way rather than mutual) used by men against their female partner, or colloquially labelled at that time as wife abuse. In contrast, opposing theorists adopted a view of gender symmetry wherein similar or equal rates of IPV are perpetrated by men and women (see Hamel, 2007). Findings of the current study provide additional support for the notion of gender symmetry in IPV. Significant moderate-high correlations were observed between the three IPV victimization and three IPV perpetration subscales (CTS2). As the sample was predominantly female (74%), these findings further highlight that, while it is acknowledged that women are victimized by IPV, it need also be acknowledged that women perpetrate IPV.

Findings also provide evidence for the application of social learning theory to past victimization (Akers, 1998; Sellers et al., 2005); namely, how past victimization alters perceptions of future life events. First, significant correlations of childhood abuse subscales were observed in relation to both IPV perpetration and victimization subscales. This may indicate that, after experiencing childhood victimization, abuse normalization may lead one to accept IPV perpetration/victimization in their subsequent adolescent and adult relationships. Second, it was found that participants who wrote-in that they did not view the IPV incident as serious had either

reported past IPV victimization/perpetration and/or above average childhood abuse scores. Such findings provide additional evidence that experiences of past victimization may also alter third-party perceptions of abuse via social learning theory.

Moreover, correlations between sex role ideology (TESR; Larsen & Long, 1988) and racial bias (CoBRAS; Neville et al., 2000) provide support for the theoretical relationship between endorsement of traditional-egalitarian sex role ideology and views of race. Specifically, the current study demonstrated that, as sex role traditionalism increased, as did skepticism of Black/White racial issues in Canadian society. It was previously found that endorsement of traditional sex roles was correlated with prejudice against Black Americans (Hoover & Fishbein, 1999), and that egalitarian beliefs may align with more liberal views of race issues (Biernat et al., 1996); though, such associations remain understudied relative to the independent effects of sex role ideology and racial bias on observer perceptions of IPV. More research is thus needed to further understand the relationship between an individual's endorsement of traditional-egalitarian sex role ideology and views of racial issues.

4.7 Limitations and Future Directions

The current study was subject to a number of limitations. First, the sample reported high sex role egalitarianism and low racial bias (i.e., cognizance of Black-White racial issues in society; CoBRAS; Neville et al., 2000). It is possible that such sample characteristics contributed to the lack of significant effects of perpetrator and victim race (Black vs. White) observed in the current study. As high sex role egalitarianism is often observed among undergraduates or those with higher education (e.g., Chatard & Selimbegovic, 2007), additional research among broader populations of young adults with more diverse views of sex roles is needed.

Second, participant IPV history as assessed by the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996) may have overestimated the prevalence of both IPV perpetration and victimization. Specifically, the psychological subscale of the CTS2 included items such as, “insulted or swore at my partner” and “said something to spite my partner”, that are scored as being indicative of psychological IPV perpetration. Parallel items for each statement (i.e., “my partner did this to me”) were also scored as indicative of psychological IPV victimization. Though the prevalence rates of IPV reported by the current sample are consistent with that of the scale creators, it is acknowledged that participants may not personally view these actions as being of an abusive nature, and therefore may not consider themselves as perpetrators and/or victims of psychological IPV.

Third, the lack of significant effects of perpetrator and victim race may be due to the target races presented in the study. Given the Canadian sample, it may have been more relevant to use racial dyads of Indigenous/White persons instead of Black/White persons. This is evident as a recent Canadian mock jury study observed harsher sentencing recommendations when a defendant was Indigenous-Canadian, relative to Black/White (Maeder et al., 2015). Another Canadian study also underscored the prevalence and severity of racism towards Indigenous students on university campuses, especially those who considered themselves as traditional Indigenous persons (Currie et al., 2012).

Another key limitation of the current study was power. To conduct multiple regression analyses which included an additional 3-way interaction between condition variables (provocation, perpetrator race, victim race), reliable data from 800+ participants would be necessary to detect a small effect. To complete the requirements of the thesis, data could only be collected over two terms; it was thus not possible to collect enough reliable data ($N = 800+$) in

that timeframe to ensure ample power for three-way interactional hypotheses. Moreover, the use of Bonferroni adjustments in the current study further reduced statistical power for each test (e.g., Nakagawa, 2004). Additional post-hoc power analyses were not conducted as researchers have warned that estimates may be misleading; this is because post hoc power analyses are conducted using sample-specific statistics to identify population-level parameters (Zhang et al., 2019). Ideally, this study would be replicated next year to achieve the requisite sample size to enable sufficiently powered analyses.

Finally, comparisons between the current study and past research were limited due to methodological choices. As the measure of sex role ideology (TESR; Larsen & Long, 1988) became non-significant when the control variable of racial bias (CoBRAS; Neville et al., 2000) was added to the model, it was posited that this may have occurred due to shared variability. However, as none of the 10 identified studies which reported significant effects of sex role ideology included a measure of racial bias, the argument of shared variability could not be supported or dismissed. Moreover, interactions between sex role ideology (TESR; Larsen & Long, 1988) and race variables (Black, White perpetrator/victim) could not be directly compared as past studies assessed such interactions using a median split on the measure of sex role ideology (Esqueda & Harrison, 2005; Willis et al., 1996). Evidently, more research is needed to untangle the effects of perpetrator/victim race, racial bias, and sex role ideology on observer perceptions of IPV; specifically, the joint influence of sex role ideology and perpetrator/victim race on perceptions of female perpetrated IPV, as no other existing studies were identified.

4.8 Conclusion

The current study aimed to address the gap in the literature pertaining to the effect of perpetrator/victim race (Black vs. White), endorsement of sex role ideology (egalitarian vs.

traditionalist), and victim provocation (present vs. absent) on observer perceptions of seriousness and attributions of blame in female perpetrated IPV. Based on quantitative and qualitative findings, it can be concluded that victim provocation was the most influential factor to observers when determining perpetrator blame and victim blame. While victim provocation also contributed to quantitative ratings of seriousness, qualitative findings highlighted that seriousness may have also been determined by the physical consequences of the IPV act itself (i.e., a single slap). Furthermore, exploratory analyses suggested that an observer's history of injurious IPV perpetration or injurious IPV victimization may influence perceptions of incident seriousness, though study replication is required to verify this relationship.

This research contributes valuable information to the IPV literature as no past studies which jointly assessed the effects of victim provocation and perpetrator/victim race (Black, White) on perceptions of female perpetrated IPV were identified. Although no significant effects of perpetrator or victim race (Black, White) were observed in the current study, it is the hope that these variables will be further assessed in future research, creating a larger body of literature to better understand the relationship between perpetrator/victim race, provocation, and perceptions of female perpetrated IPV. The use of Indigenous/White dyads of perpetrator/victim race may be especially relevant to Canadian studies.

Finally, while some sample characteristics (i.e., high sex role egalitarianism, low racial bias) may limit the generalizability of results to the broader population, findings provide valuable insight to the perceptions of IPV among undergraduate students. Namely, the varying perceptions of what constitutes IPV perpetration/victimization, as well as the inclination to blame a victim for their own victimization if they in anyway provoked their partner prior. As IPV victimization is highest among those aged 15–24 (SSPPS, 2018), institutions are asked to

acknowledge the implications of these findings, specifically as they relate to help-seeking behaviours, and provide resources pertaining to warning signs of IPV, identification of IPV, and relevant next steps.

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Appendix A – Vignette and Photographs



[Pictures indicating race were systematically varied so there are 4 dyads per ‘provocation’ and ‘no provocation’ vignettes]

Please review the following incident. Keep in mind, the incident is fictitious.

[No Provocation] You are returning home from a full day of classes when you notice your neighbours at their front door. In the past, you have heard a lot of screaming and yelling coming from their apartment, so you wait and listen. You overhear the girlfriend, [Name 1], telling her boyfriend that some girl called for him and hung up before she could take a message. She then asks who the girl might have been. [Name 2] says, “I’m not sure. It might have been someone from class today.” She yells, “Drop the attitude! Tell me who the girl on the phone was or you’ll be really sorry.” You then witness [Name 1] slap her boyfriend. [Name 2] responds by holding his cheek, wincing in pain. [Name 1] then yells, “You think that stings...Next time, it’ll really hurt!”

[Provocation] You are returning home from a full day of classes when you notice your neighbours at their front door. In the past, you have heard a lot of screaming and yelling coming from their apartment, so you wait and listen. You overhear the girlfriend, [Name 1], telling her boyfriend that some girl called for him and hung up before she could take a message. She then asks who the girl might have been. [Name 2] says, “Listen here, bitch, I told you never to answer my phone.” She yells, “Drop the attitude! Tell me who the girl on the phone was or you’ll be really sorry.” You then witness [Name 1] slap her boyfriend. [Name 2] responds by holding his cheek, wincing in pain. [Name 1] then yells, “You think that stings...Next time, it’ll really hurt!”

Appendix B – Incident Seriousness

Please rate the degree to which you agree with the following statements. You can be honest because this study will be de-identified.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

1. The boyfriend was injured seriously in this incident.
2. This incident probably left the boyfriend with psychological scars.
3. This incident should be considered as domestic violence.
4. This was a violent incident.
5. This incident raises my concern for the boyfriend's physical and psychological well-being.

Appendix C – Victim/Perpetrator Blame and Responsibility

Please rate the degree to which you agree with the following statements. You can be honest because this study will be de-identified.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

1. The girlfriend had control over the events that occurred in the described scenario.
2. The girlfriend acted carelessly in the described scenario.
3. The girlfriend's character was responsible for the event that occurred at the end of the scenario.
4. The girlfriend's behavior was responsible for the event that occurred at the end of the scenario.
5. The girlfriend was at fault for the event that occurred at the end of the scenario.
6. The girlfriend was to blame for the event that occurred at the end of the scenario.
7. Overall, the girlfriend was most responsible for the event that occurred at the end of the scenario.

[page break]

8. The boyfriend had control over the events that occurred in the described scenario.
9. The boyfriend acted carelessly in the described scenario.
10. The boyfriend's character was responsible for the event that occurred at the end of the scenario.
11. The boyfriend's behavior was responsible for the event that occurred at the end of the scenario.
12. The boyfriend was at fault for the event that occurred at the end of the scenario.
13. The boyfriend was to blame for the event that occurred at the end of the scenario.
14. Overall, the boyfriend was most responsible for the event that occurred at the end of the scenario.

Appendix D – Post-Vignette Questionnaire

Please provide the following information. You can be honest because this study will be de-identified.

1. Do you think the incident was serious in nature? Why or why not? [open-ended]
2. Who do you think is to blame for the incident? Why? [open-ended]
3. What did you think of the incident in general? [open-ended]

Appendix E – Traditional and Egalitarian Sex Role Inventory (TESR)

Please rate the degree to which you agree with the following statements. You can be honest because this study will be de-identified. [indicates reverse scoring]*

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

- *1. It is just as important to educate daughters as it is to educate sons.
- 2. Women should be more concerned with clothing and appearance than men.
- *3. Women should have as much sexual freedom as men.
- 4. The man should be more responsible for the economic support of the family than the woman.
- *5. The belief that women cannot make as good supervisors or executives as men is a myth.
- *6. The word "obey" should be removed from wedding vows.
- 7. Ultimately a woman should submit to her husband's decision.
- 8. Some equality in marriage is good, but by and large the husband ought to have the main say-so in family matters.
- *9. Having a job is just as important for a wife as it is for her husband.
- 10. In groups that have both male and female members, it is more appropriate that leadership positions be held by males.
- 11. I would not allow my son to play with dolls.
- *12. Having a challenging job or career is as important as being a wife and mother.
- 13. Men make better leaders.
- 14. Almost any woman is better off in her home than in a job or profession.
- 15. A woman's place is in the home.
- 16. The role of teaching in the elementary schools belongs to women.
- *17. The changing of diapers is the responsibility of both parents.
- 18. Men who cry have weak character.
- *19. A man who has chosen to stay at home and be a house-husband is not less masculine.
- 20. As head of the household, the father should have the final authority over the children.

Appendix F – Color-Blind Racial Attitudes Scale (CoBRAS)

Please rate the degree to which you agree with the following statements. You can be honest because this study will be de-identified. [indicates reverse scoring]*

1	2	3	4	5
Strongly Disagree				

Factor 1: Unawareness of Racial Privilege

1. Everyone who works hard, no matter what race they are, has an equal chance to become rich.
- *2. Race plays a major role in the type of social services (such as type of health care or day care) that people receive in Canada.
- *3. Race is very important in determining who is successful and who is not. (6)
- *4. Racial and ethnic minorities do not have the same opportunities as White people in Canada. (8)
- *5. White people in Canada have certain advantages because of the color of their skin. (12)
- *6. White people are more to blame for racial discrimination in Canada than racial and ethnic minorities. (15)
- *7. Race plays an important role in who gets sent to prison. (20)

Factor 2: Unawareness of Institutional Discrimination

8. It is important that people begin to think of themselves as Canadian and not African Canadian, Mexican Canadian, or Italian Canadian. (3)
- *9. Due to racial discrimination, programs such as affirmative action are necessary to help create equality. (4)
10. White people in the Canada are discriminated against because of the color their skin. (9)
11. Immigrants should try to fit into the culture and adopt the values of Canada. (13)
12. English should be the only official language in Canada. (14)
13. Social policies, such as affirmative action, discriminate unfairly against White people. (16)
14. Racial and ethnic minorities in Canada have certain advantages because of the color of their skin. (12)

Factor 3: Unawareness to Blatant Racial Issues

- *15. Racism is a major problem in Canada. (5)
16. Racism may have been a problem in the past, but it is not an important problem today. (7)
17. Talking about racial issues causes unnecessary tension. (10)

*18. It is important for political leaders to talk about racism to help work through or solve society's problems. (11)

*19. It is important for public schools to teach about the history and contributions of racial and ethnic minorities. (17)

20. Racial problems in the U.S. are rare, isolated situations. (19)

Appendix G – Feeling Thermometer

Please provide the following information. You can be honest because this study will be de-identified.

1. How do you feel about White Canadians?

[sliding scale 1-100]

2. How do you feel about Black Canadians?

[sliding scale 1-100]

Appendix H – Childhood Trauma Questionnaire (CTQ)

Regarding your childhood upbringing, please rate the degree to which you agree with the following statements. You can be honest because this study will be de-identified.

1	2	3	4	5
Never true				Very often true

Physical Abuse

1. Got hit so hard that I had to see a doctor or go to the hospital.
2. Family hit me so hard that it left me with bruises or marks.
3. I was punished with a belt/board/cord/ other hard object.
4. I believe that I was physically abused.
5. Beaten so badly it was noticed by a teacher/neighbor/doctor.

Emotional Abuse

6. People in my family called me “stupid,” “lazy,” or “ugly.”
7. I thought that my parents wished I had never been born.
8. People in my family said hurtful or insulting things to me.
9. I felt that someone in my family hated me.
10. I believe that I was emotionally abused.

Appendix I – Revised Conflict Tactics Scale (CTS2)

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 mark how many times you did each to 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, select "7". If it never happened, select "0". You can be honest because this study will be de-identified.

1	2	3	4	5	6	7	0
Once in the past year	Twice in the past year	3-5 times in the past year	6-10 times in the past year	11-20 times in the past year	More than 20 times in the past year	Not in the past year, but it did happen before	This has never happened

Psychological Aggression

1. Insulted or swore at my partner
2. Shouted or yelled at my partner
3. Stomped out of the room/house/yard during a disagreement
4. Said something to spite my partner
5. Called my partner fat or ugly
6. Destroyed something belonging to my partner
7. Accused my partner of being a lousy lover
8. Threatened to hit or throw something at my partner

Physical Assault

9. Threw something at my partner that could hurt
10. Twisted my partner's arm or hair
11. Pushed or shoved my partner
12. Grabbed my partner
13. Slapped my partner
14. Used a knife or gun on my partner
15. Punched or hit my partner with something that could hurt
16. Choked my partner

17. Slammed my partner against a wall
18. Beat up my partner
19. Burned or scalded my partner on purpose
20. Kicked my partner

Injury

21. Had a sprain, bruise, or small cut because of a fight with my partner
22. Felt physical pain that still hurt the next day because of a fight with my partner
23. Passed out from being hit on the head by my partner in a fight
24. Went to a doctor because of a fight with my partner
25. Needed to see a doctor because of a fight with my partner, but I didn't
26. Had a broken bone from a fight with my partner

Appendix J – Demographic Questionnaire

Please provide the following information. You can be honest because this study will be de-identified.

1. How old are you? _____

2. What is your sex?

- Male
- Female
- Non-binary/third gender
- Prefer not to answer

3. What is your racial/ethnic background?

- White
- Black
- Filipino
- Latin American
- Arab
- South Asian
- Southeast Asian
- West Asian
- Chinese
- Korean
- Japanese
- Indigenous

4. Have you ever been victimized by an intimate partner?

- Yes
- No
- Prefer not to answer

5. Have you ever perpetrated violence against an intimate partner?

- Yes
- No
- Prefer not to answer

6. What are your political views?

My political views lean: [sliding scale from 0 (left-wing) to 7 (right-wing)]

Appendix K – Manipulation Check

Please provide the following information. You can be honest because this study will be de-identified.

1. Please confirm you have reviewed the incident.

- I have not reviewed the incident.
- I have reviewed the incident.

[page break]

2. What was the race of the girlfriend in described incident?

- White
- Black
- Filipino
- Latin American
- Arab
- South Asian
- Southeast Asian
- West Asian
- Chinese
- Korean
- Japanese
- Indigenous
- Don't know

2. a) I am __% confident in my choice.

[This will be a sliding scale between 1-100]

[page break]

3. What was the race of the boyfriend in described incident?

- White
- Black
- Filipino
- Latin American
- Arab
- South Asian
- Southeast Asian
- West Asian
- Chinese
- Korean
- Japanese
- Indigenous
- Don't know

3. a) I am __% confident in my choice.

[This will be a sliding scale between 1-100]

[page break]

4. How did the boyfriend respond when the girlfriend asked who had called his phone?

- He responded calmly
- He swore at her

Appendix L – End-of-Study Attention Check

1. It is vital to our study that we only include responses from people that devoted their full attention to this study. Otherwise, years of effort (the researchers' and the time of other participants) could be wasted. You will receive credit for this study no matter what, however, please tell us how much effort you put forth towards this study.

I put ___ effort into this survey:

1	2	3	4	5
Almost no	Very little	Some	Quite a bit	A lot of

2. In your honest opinion, should we use your data in our analyses in this study?

- Yes
- No