

THE EFFECTS OF STATE GUN CONTROL LEGISLATION ON INTIMATE
PARTNER HOMICIDES OF WOMEN AND WOMEN OF COLOR

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Abstract

This research evaluates the associations between state gun control legislation aimed at disarming domestic abusers and levels of intimate partner homicide. This study specifically focuses on differences between the homicides of men and women, and white women and women of color. Women of color are at a disproportionate risk of becoming victims of intimate partner homicides committed with firearms; as such they remain the central focus of this work. Previous research in this field analyzes the effects of domestic violence-specific gun laws on all victims, failing to address potential disparities between victim groups. The results of this study demonstrate that men and women are not impacted in the same ways by gun control laws, nor are white women and women of color. The results show that women, particularly women of color, largely benefit from firearm restrictions and firearm surrender provisions for subjects of permanent protection orders. This study represents an important step towards assessing how gun control laws affect distinct victim groups and shows how result may vary between groups; however, further research is needed to gain a clearer picture of how communities that are particularly vulnerable to firearm intimate partner homicide benefit from gun control legislation.

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Abbreviations Used

DV: Domestic violence

DVPO: Domestic violence protection order

FIPH: Firearm intimate partner homicide

IPH: Intimate partner homicide

IPV: Intimate partner violence

NICS: National Instant Criminal Background Check System

SHR: Supplemental Homicide Reports

A note on terminology:

Intimate partner violence (IPV) and intimate partner homicide (IPH) are primarily used in this paper since they include the relationship structures that are under analysis. Intimate partner violence can occur in relationships in which two individuals do not cohabitate, and therefore are not necessarily ‘domestic.’ Also, ‘domestic violence’ includes other forms of violence that can occur in a home such as child and elder abuse, which are not under review here. However, the term ‘domestic violence’ is primarily used in legislation, courts, and in other research when addressing intimate partner violence, so it will remain in use throughout the paper where necessary. This paper will also use the term ‘Domestic Violence Protection Orders’ (DVPO) instead of ‘restraining’ orders. These terms have the same legal meaning and effect, but their use varies by the state in which the orders are in force. However, the use of the word ‘protection’ shifts the focus and importance of the order to the victim of violence rather than the abuser, so it will be the term used in this paper when referring to such orders.

Introduction

Intimate partner violence (IPV) is widespread in the United States. Over a quarter of all American women have experienced severe physical intimate partner violence, sexual violence, or stalking (Truman and Morgan 2014). Firearms are a primary tool of this abuse—recent research shows that 4.5 million women in the United States have been threatened with a gun by an intimate partner (Sorenson and Schut 2018), making up about 4% of all women of dating age in the United States. Over one million women have been shot or shot at by an intimate partner, or about 1% of dating-age women (Sorenson and Schut 2018).

Perhaps unsurprisingly, firearms also significantly increase the lethality of situations of intimate partner violence. Access to firearms throughout the course of an abusive relationship increases the likelihood of a victim's death fivefold (Campbell et al. 2003), and during assaults themselves, the involvement of a firearm makes the victim's death twelve times more likely (Saltzman et al. 1992). Levels of statewide gun ownership also positively correlate with levels of intimate partner homicide, as the 12 states with the highest levels of gun ownership have a 65% higher incidence rate of intimate partner homicide (Kivisto et al. 2019). Moreover, this seems to be a particularly American issue as women in the United States are 16 times more likely to be killed with a gun than women in economically-similar countries (Sadat and George 2019).

In combination, firearms and intimate partner violence pose a substantial threat to women in the U.S., where about 55% of homicides of women are domestic violence-related, and over 70% of these killings are committed with a firearm (Petrosky et al. 2017; Federal Bureau of Investigation 2019). Overall, in the United States, “the evidence

is clear: when a woman is killed, it is most likely to be at the hands of an intimate partner with a gun” (Zeoli and Frattaroli 2013, 1233).

The situation is even more dire for women of color, who experience disproportionately high rates of domestic violence incidents, homicides, intimate partner homicides (IPH), and firearm intimate partner homicides (FIPH) (Table 1). Black women are at particularly high risk. Intimate partner homicides are the leading cause of death for Black women ages 15-45 (Police Executive Research Forum 2019), and young Black women ages 18-34 are three times more likely than white women to be fatally shot by an intimate partner (Everytown for Gun Safety 2019). American Indian and Alaska Native women are also at a particular risk of experiencing domestic violence and are disproportionately victims of intimate partner homicide. Due to consistent inaccuracies in national crime reporting on indigenous communities, rates of all deaths, including IPV-related deaths, of American Indian and Alaska Native women are also likely to be under-recorded in national data (Lucchesi and Echo-Hawk 2018).

Table 1. Domestic Violence Rates and Homicide Rates of U.S. Women by Race

	DV Rate	Homicide Rate per 100,000	Percent Homicide Related to IPV	Percent Hom. Committed with Firearm
<i>Asian</i>	20.4%	1.2	57.8%	40.0%
<i>Black</i>	43.7%	4.4	51.3%	57.7%
<i>Hispanic</i>	35.4%	1.8	61.0%	49.4%
<i>AI/AN</i>	46.0%	4.3	55.4%	38.8%
<i>White</i>	33.1%	1.5	56.8%	53.4%

Abbreviations: AI/AN, American Indian and Alaska Native. Sources: Petrosky et al. 2017; Black et al. 2011; Everytown for Gun Safety 2019

Gun rights advocates typically argue that the best answer to the threat of domestic violence is to arm women against their intimate partners. Gun control advocates,

including a number of public health experts, warn that increasing the number of guns in abusive home will only increase violence. For them, the solution to the problem of intimate partner homicides involving firearms is to limit the abusive partners' ability to obtain and possess weapons.

The gun control position is rooted on the assumption that public policy can address intimate partner violence. However, this position is open to challenge. As I explain in the next section, there are quite a few national and state laws aimed at preventing gun violence against women. Yet, despite the existence of these laws, the United States is still home to a relatively high rate of this kind of crime. Furthermore, it has not been extensively shown that laws and regulations are associated with a decline in gun violence against women in general, nor against specific populations of women more susceptible to intimate partner attacks.

Are the intimate partner homicides of women a direct result of uneven firearms regulations across the United States, or is it that currently existing regulations are ineffective? This study will investigate whether ten different types of state gun control laws are successful in reducing levels of intimate partner homicides. It will make use of the best available data to study whether these laws are associated with declines in intimate partner homicides of men versus women, and of white women versus women of color. In doing so, it presents a more fine-grained analysis of the impact of firearms legislation than currently exists. Ultimately, I discover that women and men, and white women and women of color are not affected in the same way by gun control legislation aimed at limiting intimate partner homicides. Specifically, restrictions on permanent protection orders and surrender provisions for those orders seem to be overall most

effective for reducing intimate partner homicides of women, with particular benefits for women of color. These findings are consistent with previous research, but it is notable that for successful laws all women and women of color see most of the benefits. Overall, this study shows that legislation can be effective in achieving its stated goal of limiting gun violence against all women and women of color, and represents an important step towards addressing the intersectional realities of gun violence against women.

Firearms Legislation

Both federal and state lawmakers have enacted many measures to combat the use of firearms against victims of intimate partner violence. At the federal level, the Violence Against Women Act (VAWA) prohibits individuals subject to certain domestic violence protection orders (DVPOs) from purchasing or possessing firearms (Vigdor and Mercy 2006). Under this statute, only permanent orders, in which the respondent has been notified and had the opportunity to contest in court, carry firearm prohibitions (18 U.S.C. § 922(g)(8)). This notably excludes temporary domestic violence protection orders (ex-parte DVPOs). Ex-parte orders apply to the respondent between the time in which the petition was filed and the case is heard in court, which can take up to several weeks (Zeoli and Frattaroli 2013). This exclusion is significant in practice—the period immediately following a separation of intimate partners, which is when protective orders are most likely to be sought by petitioners, is one of the most dangerous times for victims of abuse (Amnesty International 2018).

Under VAWA, gun restrictions for subjects of permanent orders are also limited to those defined as ‘intimate partners,’ which only encompasses “the petitioner’s current or former spouse, someone the petitioner shares a child with, or a current or former

cohabitant” (Zeoli and Frattaroli 2013). The narrowness of this definition permits convicted abusive dating partners who do not share children with or live with their victim to legally remain in possession of their firearm (in states in which the definition is not legally expanded). This ‘boyfriend loophole’ has significant implications today, as about half of women killed in intimate partner homicides are killed by dating partners that do not fall under the definition of intimate partners enumerated in federal law (Cooper and Smith 2011, 18).

The Lautenberg Amendment was enacted in 1996 shortly after the passage of VAWA. This legislation prohibited all domestic violence misdemeanants whose convictions involve the “use or attempted use of physical force or threatened or actual use of a deadly weapon” (18 U.S.C. § 921 (a)(33)(A)(ii)) from purchasing or possessing weapons. Second, like all other applicable federal laws, the Lautenberg Amendment leaves a ‘relinquishment gap’— it does not mandate that persons convicted of domestic violence misdemeanors or subject to domestic violence restraining orders surrender firearms already in their possession, nor mandate that local law enforcement officers confiscate their weapons upon conviction. Nonetheless, since the inception of the National Instant Criminal Background Check System (NICS), over 210,000 firearm sales have been denied to subjects of domestic violence restraining orders and convicted domestic violence misdemeanants (Federal Bureau of Investigation 2019).

Applicable federal statutes are few and limited in scope. As such, states have the capacity to enact much stronger measures to prevent domestic abusers from purchasing and possessing firearms. Though “there is tremendous heterogeneity in the detail and scope of all of these laws” (Vigdor and Mercy 2006, 317), their goals are generally

comparable. One of the first ways in which states can attempt to limit rates of firearm intimate partner homicides is to pass laws that match federal statutes that are already enforceable in their state. Without such laws, “it can be very confusing—if not impossible—for states’ law enforcement professionals and the state courts to figure out how to implement that federal law” (Shaw 2019).

States may also address specific shortcomings in national legislation by closing the ‘boyfriend loophole’ or ‘relinquishment gap,’ or by including temporary protection orders in their gun restrictions. Many states additionally prohibit stalking misdemeanants from purchasing and possessing firearms, since 85% of attempted IPHs are preceded by some form of stalking in the year before attempted homicide (McFarlane et al. 1999). Other states require that any DV-related charges are immediately entered into the National Instant Criminal Background Check System so as to prevent abusers from taking advantage of any lags or lack of reporting between government agencies. Though each state has its own combination of gun control measures, these policy options are commonly enacted specifically to prevent the use of firearms to commit intimate partner homicides.

Literature Review

Like government officials, many academics assume that legislation outlawing the purchase and possession of firearms by domestic abusers will reduce intimate partner homicides. Previous research in this field has uncovered such associations. Studies show that state purchase and possession restrictions for persons subject to permanent protection orders (DVPOs) are associated with 10-25% reductions in levels of all intimate partner

homicides (IPH) as well as those committed with a firearm (FIPH) (Vigdor and Mercy 2003; Vigdor and Mercy 2006; Zeoli and Webster 2010).

Several more studies find that laws mandating the surrender of firearms upon the imposition of a permanent protection order are associated with firearm intimate partner homicide reductions (Dugan 2003, Díez et al. 2017, Zeoli et al. 2018). More specifically, Díez et al. (2017) demonstrate that states requiring subjects of permanent DVPOs to relinquish their firearms were home to 9.7% lower IPH rates and 14% lower FIPH rates, compared to states without these laws. However, the same studies did not uncover a statistically significant correlation between the passage of gun restrictions for domestic violence misdemeanants and IPH reduction (Vigdor and Mercy 2003; Vigdor and Mercy 2006; Zeoli and Webster 2010; Zeoli et al. 2018).

The most recent and comprehensive study in this field, Zeoli et al. (2018), posited that more expansive gun control laws, such as those that include dating partners and temporary protection orders, would be more effective in limiting intimate partner homicides. The study showed that gun restrictions covering dating partners were associated with IPH reductions of 13%, and those that included temporary protection orders were associated with reductions of 13% (Zeoli et al. 2018). Moreover, these broader laws were associated with IPH reductions of greater magnitude and statistical significance than more limited restrictions. The foremost contribution of this study to the field was its examination of several different gun control measures, rather than a limited few, on levels of intimate partner homicide. Overall, the Zeoli et al. (2018) study and other previous research indicate that there is a negative correlation between state gun control legislation targeting convicted domestic abusers and levels of intimate partner homicide.

However, research to date fails to account for the distinct ways in which gun control legislation could affect different victim groups. In their analyses, previous studies include *all* intimate partner homicides, including those with men as victims. Therefore, how particular gun control laws affect violence against women is virtually unknown. While women are commonly noted to be the most common victims of intimate partner violence both by legislators and academics, no study has examined the specific impact of gun control legislation on the intimate partner homicides of women. Moreover, though we know that women of color are disproportionately impacted by intimate partner homicides, they are not given specific attention in most academic research.

To address this shortcoming in existing literature, and to account for the intersectional nature of violence against women, I separate out intimate partner homicides of women from those of men, and I also examine violence against women of color separate from violence against white women. By exploring the particular associations between gun control laws and these groups, this study seeks to shift the focus of policy-making in this area towards the populations most affected by firearm intimate partner homicides.

Theory and Hypotheses

The theories and hypotheses tested in this paper address two overall themes that have yet to be explored in similar literature: the potentially differential effects that gun control legislation has on intimate partner homicides of men and women, and on white women and women of color.

Gun Laws and Violence Against Women

Legislation that attempts to address firearm intimate partner homicides has largely been formed with the intention to address violence against women. This can be seen in federal and state legislation alike, with nomenclature such as the Violence Against Women Act and the ‘boyfriend loophole.’ This makes sense—as Everytown For Gun Safety (2019) summarizes, “although intimate partner violence affects people of all genders and sexual orientations, the impact of abuse, including rates of severe physical violence and violence inflicted with a firearm, is predominantly experienced by women with male partners.” In relation to firearms specifically, men are twice as likely as women to own a firearm (Parker et al. 2017), and are more likely than women to use firearms as a weapon of abuse (Paulozzi et al. 2001).

Women are also more likely to request government intervention in situations of abuse against male partners. In one sample, women are to be protected and men are to be restrained for 75% of domestic violence protection orders (Sorenson and Shen 2005). In over 90% of federal prosecutions of in cases of domestic violence, the defendants are male (Durose et al. 2005). State and local prosecutions vary widely by location, though in the aggregate males are also most often the defendant (Durose et al. 2005). Protection orders and domestic violence convictions are the leading qualifications for the imposition of firearm restrictions against domestic abusers. As such, men abusing women will be the foremost group affected by gun control restrictions linked to the reduction of intimate partner homicide. For this reason, I theorize that the laws included in this study will reduce the deaths of women to a greater degree than deaths of men.

As discussed, abusive heterosexual men make up the vast majority of respondents to domestic violence protection orders (DVPOs) (Sorenson and Shen 2005; Goggins and

Gallegos 2016), and they are more likely to use firearms as a tool of abuse against women partners than vice versa (Paulozzi et al. 2001). Once enforced, these protection orders carry gun restrictions that may then reduce violence against women—abusers will be prohibited from purchasing new weapons, and where surrender provisions apply, their firearms will be physically removed from their possession. In this way, because gun provisions related to protection orders largely apply to men who abuse women, I hypothesize that:

Hypothesis 1: Firearms restrictions for DVPO respondents and surrender provisions for DVPO respondents are more likely to limit intimate partner homicides of women, than intimate partner homicides of men.

Furthermore, the most dangerous time for women leaving a situation of intimate partner violence is immediately after a breakup (Amnesty International 2018). As a result of this volatility, women most frequently request protection orders at this time. They will then receive a temporary protection order (ex-parte DVPO) until the respondent is able to appear in court, which may take several weeks. These temporary protection orders, in states with applicable restrictions, then prevent abusers from purchasing and possession firearms. Where surrender provisions for ex-parte orders are enacted, firearms will be removed from abusers immediately after the approval of the order. Because women are most likely to request protection orders and be victimized by abusive men with firearms, gun restrictions for ex-parte orders and surrender provisions for ex-parte orders may therefore protect from firearm intimate partner homicide to a greater degree than men.

Therefore, I hypothesize:

Hypothesis 2: Firearm restrictions for ex-parte DVPO respondents and surrender provisions for ex-parte DVPO respondents are more likely to limit intimate partner homicides of women, than intimate partner homicides of men.

Women of Color v. White Women

Many factors can prevent women of color from willingly engaging with or accessing legal mechanisms to combat intimate partner violence and prevent potential homicide. Such mechanisms include petitioning for a protection order, filing criminal charges, or calling the police during an incident of violence. All of these courses of action can result in gun restrictions on the abuser; however, they will most likely not be implemented unless the victim herself begins the process. In this way, the effectiveness of gun control legislation aimed at disarming domestic abusers largely hinges on the voluntary request of the victim for legal services, which may be less frequent in communities of color in the United States.

Generally, for a number of reasons beyond the scope of this paper, women in minority communities experience higher rates of poverty. Higher poverty rates are linked to reduced access to services that could lessen the risk of lethal violence (Everytown for Gun Safety 2019; McCall et al. 2010). Such resources include social support in schools, adequate availability and affordable pricing of housing, accessibility of quality healthcare, and the existence of domestic violence advocates in local government

(McCall et al. 2010). These support services all may enhance a victim's ability to pursue legal recourse against her abuser.

Factors that impede women of color from petitioning legal interventions that trigger gun restrictions and prevent intimate partner homicide also vary by the community in question. Many black women, as one researcher explains, experience "leeriness and outright fear of involving police when intimate partners, which research shows is mostly Black men, attack them" (Whitfield 2019). Distrust of police by black women can outweigh their desire for legal assistance, especially as many women victims fear mistreatment themselves if they seek governmental involvement (Whitfield 2019). This apprehension can also lead black women victims to seek protective orders and criminal proceedings against abusers in fewer numbers than white women.

American Indian and Alaska Native women victims of intimate partner violence are at a unique disadvantage to accessing effective legal intervention. As a Department of Justice researcher explains, "the position of American Indian and Alaska Native tribes as both sovereign and dependent creates problematic jurisdictional barriers that prohibit a successful criminal justice response to American Indian and Alaska Native victims of violence" (Bachman et al. 2008, 8). Depending on the race of the victim and the offender and the location of the abuse, violence against American Indian and Alaska Native women could fall under three possible jurisdictions, creating confusion for all parties. American Indian and Alaska Native women living on tribal lands are also routinely affected by a lack of funding for victim services, inadequate training of federal, state, and tribal law enforcement officers in addressing violence, and a lack of trust for outside authority (Bachman et al. 2008).

Latina women experiencing intimate partner violence also face specific barriers to accessing potentially life-saving interventions. Fear of deportation or a jeopardization of legal immigration status deter many immigrant Latina women from seeking government interventions after abuse (Messing et al. 2017). This has recently been exacerbated as ICE officers have appeared at hearings for protective orders to detain undocumented individuals (Everytown for Gun Safety 2019). A widespread lack of translating resources in all levels of government also prevents some Latina women from help-seeking when experiencing abuse (Messing et al. 2017).

Though Asian and Pacific Islander women experience the lowest levels of intimate partner homicide of any U.S. demographic, immigrant and non-English speaking Asian women face similar barriers as immigrant Latina women to accessing legal interventions, such as lack of language services and fear of deportation (Chang et al. 2009). Some Asian women also face significant cultural stigmas and potential shaming that can prevent reporting abuse, seeking protective orders, or filing criminal charges (Chang et al. 2009).

Overall, a myriad of issues prevents women of color from seeking or receiving protective orders, filing criminal cases, and police interventions at scenes of domestic violence, which are the primary methods through which abusers are prevented from possessing and purchasing firearms. Without such interventions, gun restrictions will not be applied to abusers. For this reason, I theorize that gun control laws intended to address firearm intimate partner homicides will be more effective for white women than women of color, who historically are better able to access and receive support from government

institutions, including courts, local law enforcement, government domestic violence advocates, and others that ensure the effective application of legislation.

Many states have laws that require law enforcement to confiscate firearms, the most lethal weapon of abuse, at the scene of an incident of domestic violence. This may prevent later intimate partner homicides of women, since police typically keep the confiscated firearms for an extended period of time. However, a call must be made in the first place in order for this law to be effective. As discussed, a lack of trust or fear of law enforcement in communities of color can prevent women from calling police during an instance of intimate partner violence (Everytown for Gun Safety 2019). In this way, scene confiscation laws may be less effective for women of color than white women. For this reason, I hypothesize the following:

Hypothesis 3: Laws that mandate that law enforcement officers confiscate firearms at the scene of an incidence of domestic violence are more likely to limit intimate partner homicides of white women, than intimate partner homicides of women of color.

Furthermore, a handful of states have passed laws to mandate that domestic-violence related offenses are immediately reported to the National Instant Criminal Background Check System (NICS), since in some cases inter-agency reporting is slow or never occurs. Mandatory NICS reporting laws then prevent prohibited abusers from obtaining new guns when they attempt to purchase them through federally-controlled methods in which a background check is used. By prohibiting such purchases, abusers are

less likely to be in possession of firearm after a conviction, and less likely to use that firearm against their victim. However, NICS reporting laws do not apply to purchases made on the black market, where background checks laws are flouted. In some research, minority men are found to be more likely to acquire guns on the black market (Koper 2014), meaning that abusive men of color may acquire weapons at a higher rate after a conviction than do white men. As heterosexual couples are most likely to partner within their racial group (Livingston and Brown 2017), women of color may not benefit considerably from NICS reporting laws. For this reason, I hypothesize:

Hypothesis 4: Laws mandating the reporting of DV-related offenses to NICS are more likely to limit intimate partner homicides of white women, than intimate partner homicides of women of color.

Methods and Data

This study uses fixed-effects negative binomial regressions to determine the associations between ten different state laws and both intimate partner homicide counts during the period 1985-2017. To model violence rates by population, we use fixed-effects regressions. State-years are the unit of analysis, and there are approximately 1500 observations included in the data set.

The design of this study is largely based on the work of Zeoli et al. 2018, though it has several important distinctions. The foremost difference can be seen in the dependent variables. Zeoli et al. 2018 and all previous scholarship in the field analyze effects on counts or rates of IPH and FIPH for all persons, whereas this study differentiates between

the various victim groups discussed above with the intention of examining how the impact of state laws potentially varies by group. Second, the Zeoli et al. 2018 study only measures associations between counts of IPH and FIPH and state laws, whereas this study also assesses the relationship between laws implemented and rates of IPH, similar to other works in the field (Vigdor and Mercy 2006, Díez et al. 2017). Measuring rates may be a better indicator of the impacts of laws in minority communities rather than an overall count, since counts are relatively low and have greater variance from year to year within states than do rates.

Several other factors differentiate this study from Zeoli et al. 2018 and similar work. First, this study broadens the Zeoli et al. 2018 study by including three additional types of laws pertinent to intimate partner homicide as independent variables. Second, I include data from 1985-2017 from 45 states, whereas Zeoli et al. 2018 included data through 2013. Within the period of 2014-2017 several more states enacted relevant laws, so this study may be able to uncover the potential effects of more recent gun restrictions. The range of years, laws, and states also is also larger than those included in the studies of Díez et al. 2017, Vigdor and Mercy 2003 & 2006, and Zeoli and Webster 2010, and therefore could yield results unseen in these studies.

The independent variables, binary variables indicating the existence of various state laws, are all specific to domestic violence crimes and fall into a few categories (Table 2). The first laws included are those that impose firearm purchase and possession restrictions on respondents to domestic violence protection orders (DVPOs). Three protection order restriction laws are included: those for permanent orders that do not include dating partners (matching federal restrictions), those for permanent orders that do include dating partners

(closing the boyfriend loophole), and those that extend to temporary protection orders (ex-parte DVPOs). Purchase and possession restrictions for domestic violence and stalking misdemeanants are included as well.

Table 2. Description of independent variables

Law	Description
<i>Firearm Restrictions</i>	
DVPO (no dating partners)	Prohibition of the purchase and possession of firearms for subjects of permanent protection orders only, not including dating partners, matching federal law.
DVPO (w/ dating partners)	Prohibition of the purchase and possession of firearms for subjects of permanent protection orders only, including dating partners, closing the 'boyfriend loophole.'
Ex-Parte DVPO	Prohibition of the purchase and possession of firearms for subjects of temporary protection orders.
DV misdemeanor	Prohibition of the purchase and possession of firearms for domestic violence misdemeanants.
Stalking misdemeanor	Prohibition of the purchase and possession of firearms for stalking misdemeanants.
<i>Surrender Provisions</i>	
DVPO	Laws enforcing that subjects of permanent protection orders relinquish their weapons to law enforcement.
Ex-Parte DVPO	Laws enforcing that subjects of temporary protection orders relinquish their weapons to law enforcement.
DV Misdemeanor	Laws enforcing that domestic violence misdemeanants relinquish their weapons to law enforcement.
<i>Other Laws</i>	
NICS Reporting	Laws mandating the immediate reporting of protection orders and DV-related convictions to the National Instant Criminal Background Check System (NICS)
Scene Confiscation	Laws mandating that law enforcement officers confiscate all firearms from the scene of any incidence of domestic violence

The second group of laws included in the study are those that require individuals to surrender weapons they possess once they become a disqualified owner/purchaser. Surrender provisions for subjects of permanent protection orders, temporary protection orders, and domestic violence misdemeanors are all included in this study. The last laws reviewed are those that mandate gun removal at the scene of an incident of domestic violence, and those that require reporting of protection orders or domestic violence misdemeanors to the National Instant Criminal Background Check System. To determine which states implemented each law and the years in which they entered into force, I used

research from the Zeoli et al. 2018 study, Everytown for Gun Safety database, and Giffords Law Center database, cross referencing the three data sets and conducting independent research when discrepancies were found.

There are five victim groups included as dependent variables in this study—all persons, men, women, white women, and women of color. All intimate partner homicides (IPH) and firearm intimate partner homicides (FIPH) are examined for each group. Two separate regressions are run—one using counts of each category of homicides, and one using rates of homicide by state. Each of these regressions also includes a replication using only independent variables included in the Zeoli et al. 2018 study. However, this attempted replication is not fully representative of that study, since it does not include other restrictions such as permit-to-purchase or universal background check laws that were used in Zeoli et al. 2018 as independent variables.¹ Nonetheless, between the two models in which two homicide types are examined for each victim group, there are 24 distinct dependent variables examined in this work.

All homicide data was gathered from the Supplementary Homicide Reports (SHR) published by the Federal Bureau of Investigation. The data published online by the FBI begins in 1985, which determined the start year of this study. The total intimate partner homicides and firearm intimate partner homicides are counted for each victim group using this data. Washington D.C., Florida, Kansas, Kentucky, Montana, and Nebraska have been excluded from the study due to incomplete reporting of homicide data to the FBI. Additional state-years have been excluded for lack of sufficient reporting during those

¹ This study focused on laws specific to intimate partner violence instead of the broader gun control restrictions included in the Zeoli et al. 2018 study. DV-specific legislation is typically crafted to address violence against women, in contrast to universal background check laws which intend to prevent all gun deaths. In this way, this study focuses on statutes particularly applicable to women.

years. To determine rates of IPH, population data for all states was gathered from the U.S. Bureau of the Census and the Centers for Disease Control.

The control variables in this study replicate those of Zeoli et al. 2018, updated through 2017. These variables have all been associated with changes in intimate partner homicide rates (Zeoli et al. 2018). They include: the percentage of the population identified as black, percentage above the age of 14, percentage currently married, percentage divorced, ratio of women aged 25 years or over with a college education to men in the same cohort, and the percentage of the population living under the poverty line. These variables were all collected from the U.S. Bureau of the Census.

Also included are economic figures such as the level of monetary aid to low-income families of four through Temporary Assistance for Needy Families, collected from the Welfare Rules Database, and the amount of federal funding obtained by each state from the STOP (Services-Training-Officers-Prosecutors) Violence Against Women Grant, collected from the Department of Justice. The number of police officers per 100,000 people and the rate of nonintimate partner homicides were also included, and they are collected from the FBI Crime in the United States annual report and the Supplemental Homicide Reports. The percentage of suicides committed with a gun, used as a proxy to estimate the prevalence of firearm ownership in a state, was sourced from the Centers for Disease Control.

Results

Using homicide counts as dependent variables (Table 3), there is evidence that permanent protection order restrictions that include dating partners decrease all intimate partner homicides, as well as those committed with a firearm. This law that closes the

'boyfriend loophole' is also associated with reductions in the firearm intimate partner homicides of women and white women, with no significant reductions seen for men or women of color. In the same model, surrender provisions for respondents to permanent protection orders (DVPOs) also are associated with reductions for IPH and FIPH of all women, white women, and women of color, with stronger effects for women of color ($\beta = -0.431$, 99% CI for IPH of women of color, versus -0.223 , 95% CI for IPH of white women). Surrender provisions for temporary protection orders (ex-parte DVPOs) reduced overall intimate partner homicides and those committed with a firearm, though did not have any significant impact on any particular victim group. Mandatory reporting of domestic violence-related convictions to NICS resulted in reductions in intimate partner homicides of white women, though they had no significant reductions for any other group. In contrast, the same laws were associated with increases in in both IPH and FIPH of women of color.

Unexpectedly, other statutes were also associated with increases in certain homicides using a count model. Firearm restrictions for ex-parte orders were associated with increases in intimate partner homicides of all women and those of women of color, with no effect for men or white women. Notably, there were no increases in firearm deaths, which may indicate a possible substitution effect. Domestic violence misdemeanor restrictions also yielded an increase in firearm intimate partner homicides of women of color, but were not associated with changes in any other group. In contrast, surrender provisions for domestic violence misdemeanants increased homicides for all dependent variables except the firearms deaths of men and any homicides of women of color.

Using rates of homicides for each victim group (Table 4), firearm restrictions for permanent protection order respondents that do not include dating partners and match federal restrictions have significant reductions on overall intimate partner homicides and those committed with a firearm, as well as those of all women and women of color. Women of color experience considerably higher reductions in firearm intimate partner homicides than any other group ($\beta = -0.592$, 99% CI for women of color, versus $\beta = -0.0721$, 90% CI for white women). Temporary protection order restrictions are shown to reduce overall firearm intimate partner homicides and those of men, with no significant effect on any other group. Ex-parte surrender provisions, on the other hand, yield increases for deaths of men and significant reductions for IPH of women.

In this model, permanent protection order restrictions that include dating partners are associated with increases in intimate partner homicides of women of color, with no effects for any other group. Surrender provisions for permanent respondents are associated with increases in both homicide categories for all persons and men, though have no significant associations with any group of women. Surrender provisions for domestic violence misdemeanants are associated with overall increases in IPH and FIPH, IPH of men, and IPH and FIPH of all women, though not of any particular community of women. NICS reporting is also associated with overall increases in both categories of homicides, and those committed with a firearm of all women, though not of any particular group.

Table 3. Effects of Selected Laws on IPH and FIPH by Demographic using Homicide Counts

Law	Zeoli et al. 2018 Replication		Full Dataset											
	IPH	FIPH	IPH	FIPH	Men IPH	Men FIPH	Women IPH	Women FIPH	White Women IPH	White Women FIPH	Women of Color IPH	Women of Color FIPH		
<i>Firearm Restrictions</i>														
DVPO (no dating partners) β	0.0526 [†]	-0.0445	-0.0521	-0.0465	-0.0923	-	-0.0242	-0.0343	0.0093	0.00281	-0.0611	-0.101		
	SE	-0.0348	-0.0429	-0.0358	-0.0442	-0.0608	0.00376	-0.0837	-0.0364	-0.0451	-0.0434	-0.0537	-0.061	-0.076
DVPO (w/ dating partners)	-0.0595	-0.104 *	-	0.0695 *	-0.106 *	-0.0817	-0.106	-0.0600 [†]	-0.116 *	-0.0692	-0.115 *	-0.0517	-0.11	
		-0.0347	-0.0436	-0.0348	-0.0438	-0.0608	-0.0847	-0.0355	-0.045	-0.0425	-0.0536	-0.0597	-0.076	
Ex-Parte DVPO	-0.0434	0.0988 *	0.0967	0.0457	-0.1	-0.168	0.175 **	0.146 [†]	0.108	0.137	0.310 **	0.174		
		-0.0373	-0.0467	-0.0667	-0.0784	-0.107	-0.139	-0.0664	-0.0785	-0.0813	-0.0963	-0.103	-0.118	
DV misdemeanor	0.0321	0.0493	-0.023	-0.0181	-0.0161	-0.0262	-0.0256	-	-0.0738 [†]	-0.0842	0.0553	0.154 *		
		-0.0297	-0.0374	-0.0337	-0.0429	-0.0578	-0.0815	-0.0344	0.00622	-0.044	-0.0524	-0.0584	-0.0755	
Stalking misdemeanor	0.0806 *	0.0466	0.0503	0.0233	0.0879	0.065	0.0235	-0.02	0.00938	-0.0534	0.00583	0.00836		
		-0.0371	-0.0466	-0.0396	-0.0496	-0.0636	-0.0904	-0.0405	-0.0509	-0.0495	-0.0616	-0.0639	-0.0799	
<i>Surrender Provisions</i>														
DVPO	0.011	0.0034	0.0373	0.0328	0.148	0.122	-0.318 **	-	0.338 **	-0.223 *	-0.269 *	-	-0.343 *	
		-0.035	-0.0426	-0.0402	-0.0495	-0.132	-0.178	-0.0813	-0.0989	-0.0993	-0.12	-0.128	-0.152	
Ex-Parte DVPO			-0.207 *	-0.222 *	0.041	-0.0219	0.0000923	-	0.00243	-0.0147	-0.0254	-0.0201	-0.0274	
			-0.0813	-0.0985	-0.0657	-0.0896	-0.0409	-0.0506	-0.0489	-0.0605	-0.0669	-0.0811		
DV Misdemeanor			0.152 **	0.182 **	0.194 **	0.114	0.118 **	0.173 **	0.124 *	0.220 **	0.0943	0.11		
			-0.0413	-0.0529	-0.0717	-0.108	-0.0413	-0.0532	-0.0496	-0.0631	-0.0689	-0.089		
<i>Other Laws</i>														
NICS Reporting			0.074	0.0525	0.134	0.102	0.0473	-	0.00284	-0.248 **	-0.221 [†]	0.463 **	0.330 *	
			-0.0723	-0.103	-0.127	-0.235	-0.0713	-0.103	-0.0911	-0.128	-0.108	-0.156		
Scene Confiscation	0.0607 [†]	0.0458	0.0417	0.0184	0.00883	0.0237	0.0528	0.0154	0.0223	-0.00531	0.0915	0.0352		
		-0.0331	-0.04	-0.0335	-0.0409	-0.0535	-0.0719	-0.0353	-0.0438	-0.0426	-0.0523	-0.0596	-0.0749	

** P value < .01, * P value < .05, † P value < .10. Vector of controls excluded for the purpose of presentation.

Table 4. Effects of Selected Laws on IPH and FIPH by Demographic using Homicide Rates

		Zeoli et al. 2018 Replication		Full Dataset									
Law		IPH	FIPH	IPH	FIPH	Men IPH	Men FIPH	Women IPH	Women FIPH	White Women IPH	White Women FIPH	Women of Color IPH	Women of Color FIPH
Firearm Restrictions													
DVPO (no dating partners)	β	-0.119**	-0.0857**	-0.116**	-0.0759**	-0.0904**	-0.0273	-0.139**	-0.0975**	-0.0818†	-0.0721†	-0.580*	-0.592**
	SE	-0.0282	-0.0214	-0.0288	-0.0218	-0.0318	-0.0249	-0.043	-0.0327	-0.0496	-0.0368	-0.236	-0.222
DVPO (with dating partners)		-0.00271	-0.00192	-0.00294	0.00116	-0.00061	-0.0125	-0.00616	-0.0122	-0.0192	-0.00914	0.532*	0.541**
		-0.0264	-0.02	-0.0266	-0.0201	-0.0294	-0.023	-0.0397	-0.0302	-0.0459	-0.034	-0.218	-0.205
Ex-Parte DVPO		-0.0606†	-0.0592*	-0.0425	-0.105*	-0.160*	-0.163**	0.0742	-0.0459	0.0129	-0.0637	0.415	0.245
		-0.0324	-0.0246	-0.0624	-0.0472	-0.0689	-0.054	-0.0932	-0.0709	-0.107	-0.0797	-0.51	-0.48
DV misdemeanor		0.0298	0.0172	0.0117	0.0112	0.0226	0.0121	0.00307	0.0201	-0.0284	-0.00433	0.153	0.152
		-0.0231	-0.0175	-0.0254	-0.0192	-0.0281	-0.022	-0.0379	-0.0289	-0.0438	-0.0325	-0.208	-0.196
Stalking misdemeanor		0.107**	0.0764**	0.0671*	0.0371	0.0805*	0.0437	0.0561	0.02	0.0148	-0.00383	0.146	0.175
		-0.0313	-0.0238	-0.0334	-0.0253	-0.0369	-0.0289	-0.0499	-0.0379	-0.0575	-0.0427	-0.273	-0.257
Surrender Provisions													
DVPO		0.0899**	0.0949**	0.0810**	0.0731**	0.0902**	0.0691**	0.0695	0.0647†	0.0435	0.0366	-0.0893	-0.132
		-0.0281	-0.0213	-0.0309	-0.0234	-0.0342	-0.0268	-0.0462	-0.0352	-0.0533	-0.0395	-0.253	-0.238
Ex-Parte DVPO				-0.0355	0.0522	0.164*	0.160*	-0.236*	-0.0483	-0.0611	0.0245	-0.474	-0.214
				-0.072	-0.0545	-0.0796	-0.0624	-0.108	-0.0819	-0.124	-0.0921	-0.589	-0.555
DV Misdemeanor				0.0988**	0.0745**	0.0850*	0.0480†	0.109*	0.0952*	0.107†	0.0758†	0.208	0.22
				-0.0331	-0.025	-0.0365	-0.0286	-0.0494	-0.0376	-0.057	-0.0423	-0.271	-0.255
Other Laws													
NICS Reporting				0.123*	0.106*	0.089	0.0876†	0.159†	0.135*	-0.0206	0.0608	0.562	0.381
				-0.0558	-0.0423	-0.0617	-0.0483	-0.0834	-0.0634	-0.0962	-0.0713	-0.457	-0.43
Scene Confiscation		0.0673*	0.0457*	0.0604*	0.0428†	0.0560†	0.029	0.0623	0.0521	0.0134	0.0244	0.206	0.153
		-0.0293	-0.0222	-0.0294	-0.0223	-0.0325	-0.0255	-0.0439	-0.0334	-0.0507	-0.0376	-0.241	-0.226

** P value < .01, * P value < .05, † P value < .10. Vector of controls excluded for the purpose of presentation.

Discussion

Lessons from the study

Considering the many results of this study, it is apparent that gun control laws affect men and women in distinct ways. Several statutes in both models are associated with reductions of homicides of women, white women, or women of color that do not impact men. Closing the ‘boyfriend loophole,’ for example, is only associated with reductions of homicides of all women and white women, with no effects for men when using homicide counts. Similarly, closing the ‘relinquishment gap’ for subjects of final protection orders correlate with reductions in homicides of all women, white women, and women of color, with no effects for men when considering homicide counts. Both of these statutes have been linked to overall homicide reduction in previous research (Zeoli and Webster 2010; Zeoli et al. 2018), yet the results of this study indicate that women are primarily the benefactors of such legislation. Though any homicide reduction is generally desirable, these findings are promising for legislators who enacted such laws with the intent to address violence against women.

Likewise, white women and women of color do not seem to be impacted in the same manner by gun control legislation targeting domestic abusers. For example, using homicide counts, women of color do not experience homicide reductions even though white women do when gun restrictions ‘close the boyfriend loophole.’ This may indicate that barriers to legal access in communities of color limit the effectiveness of this statute. Alternatively, this particular finding could show that relationship structures vary by community, and thus which ones are included in gun control legislation have a measurable impact on its effectiveness in different groups. Either way, in this case it is

evident that women of color do not benefit from this law in the same manner as white women.

On the other hand, when using homicide rates, reductions of homicides occur amongst women of color to a greater magnitude than white women when gun restrictions for subjects of permanent protection orders are implemented. This could disprove the theory advanced in this paper, and it could indicate that despite potential barriers, any legal intervention in communities of color is particularly impactful. In this way, communities of color could experience gun violence reduction to a greater degree than white women. Again, though this was not a result predicted in this study, this is a promising finding for those seeking to particularly address intimate partner homicides of women of color. In summary, though the theories posited are not wholly confirmed by the results of this study, it is clear that women and men, and white women and women of color are not affected in the same way by gun control legislation aimed at limiting intimate partner homicides and those committed with firearms.

Like the theories, the statute-specific hypotheses varied in their accuracy. The first hypothesis, that women would experience greater reductions in homicides than men after the passage of gun restrictions and surrender provisions for subjects of final protection orders, can be somewhat seen in the results. In the rate model, final protection order restrictions appear more effective for women, especially women of color, when they do not include dating partners, than for men as a group. Moreover, in the count model, surrender provisions for persons subject to final protective orders show particularly strong correlations with reductions in all categories of deaths of women, whereas men are not shown to be affected. These results indicate that firearm restrictions

for subjects of final protection orders do have a stronger preventative effect for women than men, likely for the hypothesized reason that abused women are the most frequent beneficiaries of protection orders.

Restrictions for temporary protection orders, which were also hypothesized to have a greater preventative effect for women, were not as clearly beneficial. Unexpectedly, in the homicide count model, these restrictions were associated with an increase in the intimate partner homicides of women and women of color. Because all intimate partner homicides rose and not those committed with a firearm, this may possibly indicate a substitution effect on the part of abusers towards non-firearm methods of assault during what can be the most volatile part of an abusive relationship. However, using homicide rates, surrender provisions for temporary protection orders were associated with reductions in the intimate partner homicides of all women, whereas they were associated with increased in homicides against men. This may indicate that actually confiscating weapons from abusive men may be a more effective overall strategy to prevent the deaths of women, rather than just restricting the purchase and possession firearms. If a substitution effect does exist towards other methods of assault after the imposition of firearm restrictions on respondents to temporary protection orders, then legislators will need to develop additional measures to counteract this effect.

This study also hypothesized that laws mandating the confiscation of firearms at the scene of an incidence of domestic violence would be more effective for white women than women of color, who may be more hesitant to involve law enforcement in the midst of an assault. However, these laws did not yield significant results for white women or women of color in either model. It may still be the case that women of color call for

intervention at lower rates than white women, yet such calls may not be effective for preventing later homicide for any group.

The last hypothesis, that white women may benefit to a greater degree than minority women from laws mandating reporting of domestic violence-related offenses to the National Instant Criminal Background Check System, can be observed somewhat in this study in the count model. The law is associated with a reduction in IPH for white women and an increase in IPH and FIPH of women of color. Given that heterosexual couples are most likely to partner within their racial group, this finding may indicate that more abusive white men than men of color are blocked from purchasing and then using firearms from federally-controlled vendors and later using such weapons to kill their partners. However, the same hypothesis doesn't necessarily explain why such a law would increase violence against women of color. These laws are only in effect in 4 of the 45 states included in this study, so further state-specific research could be warranted in this case to investigate the disparity seen in this study.

In both models, laws mandating the surrender of weapons for domestic violence misdemeanants were associated with increases in homicides for all persons, men, all women, and white women. This finding is unusual, and may have to do with the small population that is convicted of misdemeanors. Only 3-6% of self-reported cases of rape, physical assault, and stalking by intimate partners result in a criminal conviction for those crimes (Rape, Abuse, and Incest National Network 2018), whereas female victims of rape and sexual assault seek protection orders in one out of every six cases of physical assault and in one-third of instances of stalking (Vigdor and Mercy 2006, 322). Criminal charges are typically pursued when physical evidence against the abuser is strong, which can

mean that the abuse itself is worse and more prolonged than in other cases (Lininger 2015). It is possible that this population of convicted persons, which is smaller and perhaps has a longer history of violence than persons subject to protection orders, is more likely to continue this pattern of violence even after the mandated surrender of weapons. Whatever the case may be, this particular finding, evident in both models, is worrisome and merits additional research.

To synthesize, this study shows that legislation can be effective in achieving its stated goal of limiting gun violence against all women and women of color. Specifically, restrictions on permanent protection orders and surrender provisions for those orders seem to be most effective for reducing intimate partner homicides of women, with particular benefits for women of color. The same laws when applied to domestic violence misdemeanants seems to have no effect, or worse, increase violence for all women and women of color. These findings are consistent with previous research, but it is notable that for successful laws all women and women of color see most of the benefits.

Limitations of the study

The results of this study may be limited by the data sources used. Specifically, the FBI's Supplemental Homicide Reports (SHR) rely on reporting from states to the national database, and states often do not fully report their homicide records. By excluding five states with poor reporting records and additional state-years with low reporting, this study attempted to eliminate unrepresentative data. Nonetheless, other state-years that remained in the study could be unknowingly problematic. To mitigate this issue, researchers in recent studies (Díez et al. 2017; Zeoli et al. 2018) cross-referenced SHR data with unpublished national homicide data; I did not have access to this database

and was unable to do the same. However, I excluded the same states that Zeoli et al. 2018 excluded, and in this way attempted to use the dataset most representative of levels of intimate partner homicides nationwide.

Furthermore, this study could be limited by the statistical models used. Similar research in this field varies between the use of homicide counts and homicide rates as dependent variables. The use of counts indicates which laws reduce the total number of deaths by the greatest amount, which can be useful when aggregating all homicide data, as previous studies do. In this study, rates may be a better indicator of the impacts of laws in minority communities rather than an overall count, since in some states homicide counts for women of color are relatively low and have greater variance from year to year than rates do. However, it is unclear if one method is inherently superior or gives results more indicative of the changes that actually occur once gun control laws are implemented.

Avenues for further research

This study uses only laws specific to intimate partner violence as its independent variables. The ten laws included do make up an exhaustive list of such laws, and two statutes that have not been included in any other studies are researched here. However, broader gun control legislation, such as point-of-transfer, permit-to-purchase, and other background check laws for all offenders, could also potentially be effective in reducing rates of intimate partner homicides. Such laws have been associated with reductions in all homicide rates (Rudolph et al. 2015; Webster et al. 2014), though have yet to be linked to IPH specifically. Additionally, restricting gun sales to all violent misdemeanants has been recognized as a measure potentially relevant to preventing intimate partner homicides. In

court, offenders are likely to plead down to other violent misdemeanors that carry shorter sentences than domestic violence, or in some cases prosecutors will pursue ‘easier’ charges than domestic violence (Lininger 2015). From this, it can be expected that broader state laws that prohibit all violent misdemeanants from purchasing and possessing firearms may have a greater effect on IPH rates if abusers are convicted of other crimes. In summary, this study could be expanded to include background check laws and broader firearm restrictions to investigate whether women or women of color see particular benefits from such measures.

Moreover, it is essential to recognize that women of color are not a monolith, and that each racial group discussed in this paper could benefit from its own study of this nature. Similar to the studies of Webster et al. 2015, Rudolph et al. 2015, or Vittes and Sorenson 2008b, state-level or city-level analysis could be appropriate for further research on the impacts of legislation on certain populations since racial demographics vary so greatly by U.S. region. A difference-in-difference method similar to the Cifrasi et al. 2015 study could be a unique and effective way to measure the impact of a law on a particular community. Given the data available in the Supplemental Homicide Reports and the variation in demographic makeup by state, women of color were examined as a whole in this study, instead of separating each minority group. Ideally, future studies could accomplish what this one could not by researching each demographic individually.

The LGBTQIA+ community is also often excluded from conversations related to intimate partner violence and homicide. This group could greatly benefit from a study of this nature, especially as some LGBTQIA+ individuals experience very high rates of intimate partner violence throughout their lifetimes. CDC research shows that bisexual

women, lesbian women, and transgender adults are victimized at rates of about 50% (Walters et al. 2013, 1). However, because gender and sexuality statistics are often omitted in both local and national crime reporting, there is a significant lack of data and research concerning the overall homicide rates and intimate partner homicide rates in the LGBTQIA+ community (Everytown for Gun Safety 2019). Given the gendered and hetero-normative framework that pervades much of existing domestic violence literature and legislation, an investigation into the effectiveness of the domestic violence legal framework in the LGBTQIA+ community could be particularly revelatory and useful.

Finally, a population density variable could be added to a study in this field to explore whether there are differences between the effectiveness of gun control laws in rural and urban areas. Intimate partner violence presents a specific challenge to women in rural areas who may have little access to domestic violence resources more readily available in cities, and there is evidence that rural white women experience higher rates of IPV than urban white women (Peek-Asa et al. 2011). A rural-urban comparison has yet to be made in similar studies. The Supplemental Homicide Report provides information on the population density of the location in which an intimate partner homicide occurs, so adding this variable to any study using the SHR would be relatively simple in a future study.

Overall, this study is a small step towards a more specific analysis on how intimate partner violence-specific gun control legislation affects women and women of color. More research is needed to gain a clearer picture about how legislation affects distinct groups in distinct ways.

Conclusion

This research evaluates the associations between state gun control legislation aimed at disarming domestic abusers and levels of intimate partner homicide. This study specifically focuses on differences between the homicides of men and women, and white women and women of color. Previous research in this field analyzes the effects of domestic violence-specific gun laws on all victims, failing to address potential disparities between victim groups. Women, particularly women of color are at a disproportionate risk of becoming victims of intimate partner homicides committed with firearms; as such they remain the central focus of this work.

The results of this study demonstrate that men and women are not impacted in the same ways by gun control laws, nor are white women and women of color. Specifically, restrictions on permanent protection orders and surrender provisions for those orders seem to be overall most effective for reducing intimate partner homicides of women, with particular benefits for women of color. These findings are consistent with previous research, but it is significant that for more effective laws all women and women of color see most of the benefits. Overall, this study shows that legislation can be effective in achieving its stated goal of limiting gun violence against all women and women of color. This study represents an important step towards assessing how gun control laws affect distinct victim groups and shows how result may vary between groups; however, further research is needed to gain a clearer picture of how communities that are particularly vulnerable to firearm intimate partner homicide benefit from gun control legislation.

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