The Role of Officer Gender in Responses to Domestic Violence

Maria Mercedes Ponce de Leon *

Click here for the most recent version

Abstract

Do female officers handle domestic violence calls for service differently than their male counterparts? I study this question empirically using novel data from Seattle. Patrol officers are quasi-randomly assigned to incidents, which allows me to identify the causal effect of officer gender on policing outcomes. Teams with at least one female officer are more likely to find the initial report credible: Incidents described as domestic violence by the call taker are more likely to retain that designation and to be recorded as a crime when there is a female officer on the team. In less severe cases, where officers have more discretion, the presence of a female officer also increases the probability of an arrest being made. These differences lead to lower rates of future victimization. I also find evidence that teams with female officers exert more effort at the scene than all-male teams when responding to these incidents. Taken together, my findings highlight the importance of gender diversity in law enforcement and suggest that the strategic dispatch of female officers could enhance the effectiveness of police responses to domestic violence.

JEL classification: J12, J16, K42

^{*}Brown University, maria_ponce_de_leon@brown.edu I thank Brian Knight, Anna Aizer, Jesse Bruhn, and numerous seminar and conference participants for valuable feedback and suggestions. I also thank the Seattle Police Department for granting me access to their administrative data and the Seattle Police Department staff for providing invaluable insights into the context and the data

1 Introduction

Domestic violence (DV) is pervasive: In the US alone, 114 million people reported experiencing it at least once in their lifetime (CDC, 2024). Yet, historically, it has not been taken seriously by law enforcement, who have often dismissed it as a private family issue. ¹ A key feature of DV is that it is highly gendered: 85% of victims of DV are female (Catalano, 2012). On the other hand, those assisting these victims are usually men, since law enforcement remains a very male-dominated field: nationwide in the US 87.5% of officers are male (Federal Bureau of Investigation, 2017).

These gender disparities raise important questions about the efficacy of law enforcement. Individual officers have a large degree of discretion when responding to incidents, which could lead to worse outcomes if male officers discount the experiences of female victims or if female victims feel less comfortable disclosing case details to male officers. While it has long been theorized that female officers are better-suited to investigating crimes against women, the existing literature on individual officer behavior and the role of gender in the context of these crimes is sparse and correlational in nature (Chu and Sun, 2014, Sun, 2007, Kennedy and Homant, 1983).

In this paper, I study whether female and male officers handle domestic violence calls for service differently. Specifically, I examine differences in officer reporting rates and enforcement activity by the gender composition of the team of responding officers. To do so, I focus on the likelihood of the incident being labeled as DV by the officers and being reported as a crime, as well as the probability of an arrest being made at the scene.

I study this question in the context of Seattle, for which I have detailed administrative

 $^{^1{\}rm This}$ has been documented extensively by the media. See, for example, https://theappeal.org/champaign-police-domestic-violence-laws-invisible-institute-illinois-public-media/, https://www.theguardian.com/society/2021/sep/17/no-support-domestic-abuse-victims-on-being-ignored-by-police

data provided by the Seattle Police Department (SPD). The data includes the universe of 911 calls made in the city between 2012 and 2023, linked with information on every officer that reported to the scene of the incident and information on every crime committed. To address endogeneity of the gender of responding officer, I exploit the conditional random assignment of officers to incidents. This stems from the dispatching procedures in place in Seattle. I then compare calls for DV where at least one female officer was dispatched to calls where all the responding officers were male.

I find that when a female officer is present, officers take domestic violence calls for service more seriously than when responding officers are only men. When at least one female officer is dispatched, it is less likely that the officers will remove the DV label from the classification of the incident. Furthermore, dispatching at least one female officer also increases the likelihood that the incident will be reported as a crime, the first step needed to bring charges against the offender.

The main results appear to be driven primarily by cases in which officers have the most discretion. In Seattle, arrest is mandatory in DV cases involving assault or breaking of protective orders. In every other case, which includes cases of disturbances or threats related to DV, arrest is discretionary. In cases in which there is officer discretion, dispatching a female officer results in a 7.9% higher likelihood of an arrest being made at the scene. For these incidents, I also find that dispatching a female officer results in a 4% higher likelihood of the classification remaining DV, and a 4.9% higher likelihood of the incident being reported a crime rather than a civil matter. For incidents where arrest is mandatory, namely those related to assaults or the breaking of a no-contact order, I only find differences in the likelihood of the final classification of the incident being DV and a smaller difference in the probability of a criminal report being written.

These results are robust to the inclusion of additional controls for officer characteristics, namely the average experience of the first responding officers and a measure of the racial diversity of the team. This is consistent with the officers initially dispatched being randomly assigned. The results are also robust to a variety of alternate specifications of the model that control more and less stringently for location and time characteristics.

The differences in how teams with female officers handle DV calls appear to lead to a reduction in the probability of a future incident of DV. This effect is concentrated in the short run. Specifically, when at least one female officer is dispatched, it is less likely that there will be a subsequent call for DV within 30 days of the original incident. The reduction is driven by a 2.9% lower likelihood of future victimization within the first 15 days following the original incident.

I find evidence that the results found are partly driven by teams with female officers taking every incident more seriously than their all-male counterparts, not just DV. When I look at calls involving violence between two or more people but that the call-taker did not classify as DV, I still find that teams including at least one female officer are more likely to label the incident as DV and to report it as a crime. ² However, the results found for arrests in cases of disturbances or threats related to DV appear to be driven by a change in behavior when dispatched to DV calls. For other violent incidents, in fact, I find no significant difference by team gender composition in the propensity to arrest on the scene.

The main results are also consistent with teams with female officers exerting more effort when dispatched to DV calls than all-male teams. I study effort provision using two different measures: the time spent at the scene and the propensity to list multiple offenses when writing criminal reports. Both of these measures capture the degree of thoroughness and engagement in handling DV cases. I find that teams with female officers spend 4% longer at the scene and are also more likely to list additional smaller charges in criminal reports. The latter is among the most important optional actions officers can take to increase the likelihood of prosecution in DV cases, according to the FBI (Nelson 2013).

²The incidents included are disturbances, threats, assaults and fights not related to DV.

This paper contributes to the literature on the effects of diversity on individual's welfare by demonstrating why gender diversity is important in police departments. It has been shown that having teachers (Dee, 2005) and doctors (Cabral and Dillender, 2024, Ye and Yi, 2023) that share one's same race or gender can lead to improved outcomes. However, when it comes to policing, most of this literature has focused on the impact of racial diversity, while gender diversity has been relatively underexplored. A large body of research studies the effect of officer race on various police decisions including traffic stops and issuing fines (Antonovics and Knight, 2009; West, 2018; Goncalves and Mello, 2021; Anwar and Fang, 2006), use of force (Hoekstra and Sloan, 2022, Johnson et al., 2019), and arresting decisions (Weisburst, 2022; Rivera, 2022). McCrary (2007) examines the effect of affirmative action programs in police departments on police performance. The most closely related paper is Miller and Segal (2019), who use aggregate data and find that the introduction of women into the police force as a result of court orders raised domestic violence reporting and reduced intimate partner homicides. This study builds on these findings using rich incident-level administrative data to uncover why gender diversity matters in policing and how it can lead to improved outcomes for victims.

I also contribute to the literature on DV by providing the first causal estimate of the importance of the gender of the dispatched officers. A considerable body of research has studied determinants of DV, such as labor market conditions (Aizer, 2010; Erten and Keskin, 2024; Bhalotra et al., 2021), culture (Alesina et al., 2016), and unexpected losses of local sports teams (Card and Dahl, 2011), as well as the effect of different policies and responses to DV such as no-drop policies (Aizer and Dal Bo, 2009), pressing charges (Black et al., 2023), and arrests (Iyengar, 2009, Amaral et al., 2023, Chin and Cunningham, 2019). Observational studies in criminology have also suggested that the presence of female officers might affect victim outcomes, as they might provide more support to victims and take their case more seriously (Stalans and Finn, 2000; Chu and Sun, 2014; Sun, 2007).

The rest of the paper is organized as follows. Section 2 provides relevant institutional background on how the SPD dispatches officers to calls for service, as well as how they handle DV incidents. In Section 3, I provide additional details on my data and empirical strategy. Section 4 presents the main results, and Section 5 explores the mechanisms behind the results and tests their robustness. Section 6 concludes.

2 Institutional Background

This section provides details on the relevant institutional background. I begin by explaining how the dispatch procedures work within the Seattle Police Department, which is critical for my research design. I then explain the directives in place within the Seattle Police Department as it related to domestic violence incidents.

2.1 Dispatch Procedures in Seattle

Seattle is located in Washington State. As of 2024, it has a population of 759,915 people, making it the 18th most populated city in the United States and thus comparable in size to other major US cities (World Population Review, 2024). It is further representative in terms of the share of female officers employed by the city's police department. Calculating the share of full-time sworn police officers with arresting power who are female for all US police departments serving at least 250,000 people (Figure A.I), I find that Seattle, which is denoted by the red vertical line, is near the middle of the distribution. This sugges that Seattle's police force is broadly representative of large cities in the US along this dimension.

Seattle is organized into five precincts, each with its own dedicated dispatcher responsible for handling service calls originating within the precinct's boundaries. To distribute the workload among patrol officers, these precincts are then further divided into 17 sectors, with each sector containing three beats. Figure 1 depicts these geographic units. Each day

³The share of full-time sworn police officers with arresting power who are female for all US police departments serving at least 250,000 people was calculated using the 2013 wave of the LEMAS survey.

is divided into three shifts. ⁴ Patrol officers are always assigned to patrol in a specific sector and precinct during a specific shift. In some instances, they will be further assigned a beat within the sector, while in other cases, they will float across the 3 beats contained within their sector. On any given day, within a beat, there will be one patrol car that is patrolling that beat only, and the officer(s) in that car are called the primary beat officer(s). ⁵ On a given beat, there will typically also be at least one other car patrolling that beat, corresponding to officer(s) assigned to float among the beats in the same sector. ⁶

Every 911 call will be routed to one of five designated radio dispatch zone based on its location. The call taker will then record important information for the responding officers such as a description of the incident and details on the exact location where it is taking place. Based on the information shared, the call taker will then assign a priority level and an initial incident type classification. The priority level assigned ranges from 1 (most urgent) to 7 (least urgent) and determines how quickly officers respond, with more urgent calls being dispatched first. The initial classification of the incident is done by choosing the call type code that most closely represents the circumstances of the situation or nature of the request. As the call taker collects this information, it will be shared electronically with a dispatcher, who will start to coordinate a response with the necessary emergency service.

Conversations with SPD confirmed that when deciding which officer(s) to dispatch to each call, the most relevant geographic level is the sector. Calls coming from within a specific sector will be handled by officers assigned to patrol in that sector, unless none are available ⁷. When deciding which officer(s) from the sector to assign to the call, the dispatcher will

 $^{^4{\}rm The}$ three shifts are as follows: first shift is from 3 AM to 12 PM, second shift is from 11 to 8 PM, and finally, the third shift is from 7 PM to 4 AM

⁵Within that car, there may be more than one officer

 $^{^{6}}$ According to conversations with staff from SPD, the number of patrol cars that are floating at any given time depends on staffing. In my data, I have the exact sector assignment of officers between 2016 to 2023, and I can see that the average number of cars in each sector on each shift exceeds 6, which would mean that there are, on average, 3 cars corresponding to the primary beat officer(s) of each beat, plus at least 3 patrol cars floating across beats.

⁷A patrol car from another sector might also be dispatched in cases in which the number of cars necessary (which depends on the severity of the call) exceeds the number of patrol cars available in the sector.

take into consideration proximity, availability, and number of patrol cars needed ⁸. While dispatchers have some discretion in this choice, the primary goal is to respond to the call as fast as possible.

These dispatch procedures point to there being conditional random assignment of officers to calls. Specifically, within a sector and at a specific point in time, the officers assigned (and, more importantly, the gender of those officers), should be as-good-as random. My empirical strategy will then rely on the assumption that sector-by-time fixed effects should allow me to isolate as-good-as-random variation in the gender of the responding officers. In Section 3.2, I explain in detail how I do this, and provide evidence in favor of the validity of this assumption.

2.2 Domestic Violence in Seattle

The Seattle Police Department defines DV as a pattern of harmful behavior by one person intended to control another person within a romantic, intimate, or family/household member relationship ⁹. This abuse can take various forms, including emotional manipulation and physical harm. In Washington State, where Seattle is located, it is illegal for a partner to physically harm you, force you into sexual activity, threaten to hurt or kill you or your children, or destroy your property. This means that, for example, emotional abuse can be considered domestic violence, but not illegal if the perpetrator does not threaten the victim or their children, or if police do not believe these threats took place.

When assigning an initial classification to the incident, the call taker can add a DV la-

⁸In theory, dispatchers are meant to consider who the primary beat officers on the beat from which the call is coming from are when deciding who to assign to the incident. However, conversations with an SPD employee who currently works in public affairs and was previously a patrol officer revealed that this is not always respected. This was confirmed by the research scientist who shared assignment data with us and stated that the beat is not relevant. This is also confirmed by the shared data shared covering where each officer was assigned, in which the beat is not even listed

⁹For further details, see https://www.seattle.gov/police/need-help/crimes-against-persons/domestic-violence/what-is-domestic-violence

bel. For example, if they believe the call is related to an assault, the call taker can either chose to assign the classification Assault or, if she believes that the assault is DV (based on the relationship between the alleged offender and victim), they can assign the classification Assault - Domestic Violence. To conduct my analysis and study whether police responses to DV vary by officer gender, I focus on the set of calls that the call taker believed to be DV related. ¹⁰

Upon arriving at the scene, the patrol officer(s) might determine that the DV label added by the call taker was incorrect. This could happen, for instance, if they find that the relationship between the victim and perpetrator does not meet the criteria defined by the SPD for DV (e.g., they are friends rather than intimate partners or family members) or if they conclude that the incident is not part of a pattern of harmful behavior. In the period studied, this happens in approximately 40% of cases, and the most common new classification by the officer is *Disturbance – Other*¹¹.

Also at the scene, the responding officer(s), after gathering evidence and speaking with the complainant, alleged offender and possible witnesses, will also determine whether a crime took place. If they determine that no illegal activities took place, they will write an incident report explaining the situation and how they handled it. This could happen, for instance, if the victim was emotionally abused, but officers do not believe that the perpetrator threatened the safety of the victim. If they determine that a crime took place, they will write a criminal report and list all crimes they believe took place. Listing multiple charges in the criminal report is among the most important optional actions responding officers can take to increase the likelihood of prosecution, especially in DV cases (Ferguson and Douglas, 2016 , Nelson, 2013¹²). Furthermore, in cases in which officers respond to a DV call and have

¹⁰I do so to ensure that my sample is exogenous to what officers believe to be domestic violence.

¹¹In over 97% of cases in which officers classify the incident as *Disturbance – Other*, they also report it as a civil matter as opposed to a crime.

¹²This was also confirmed to us by a coordinator of law enforcement training from the Rhode Island Coalition Against Domestic Violence.

probable cause to believe that a crime took place, they are expected to seize all firearms that were used or threatened to be used during the offense.

When incidents are classified as DV, resources are available within the SPD to further assist victims. Specifically, SPD has two teams that can offer support services to DV victims. Community Service Officers (CSOs) can respond to the scene of DV incidents once the police have completed their work. CSOs can then provide food, shelter, phones, clothing, hotel room vouchers, transportation, and emergency shelters for victims. The Victim Support Team (VST) comprises social workers that have obtained their master's degree and work directly with DV victims. They offer short-term advocacy and connections to resources in the community and within the criminal justice system. They also assist in admitting DV victims and their children into confidential, protective shelters.

If responding officers disagree with the DV label and remove it, the available resources are reduced. For example, shelters for DV victims are no longer an option, and advocates from the VST will no longer be called and the services they could have provided will no longer be available to victims ¹³. Leaving the DV label will also be consequential for the perpetrator. A conviction for a DV charge can result in the loss of gun rights, supervised probation for two years, and having to attend court-ordered treatment programs or counseling ¹⁴, Further, a misdemeanor DV charge is automatically upgraded to a felony if the offender has at least two previous convictions for other crimes of DV (such as for assault or harassment) within the previous ten years.

 $^{^{13}}$ There is a possibility that their services are provided to victims if the victims themselves calls or emails the VST and ask for help. However, this requires that the victims know about the VST and how to contact them.

¹⁴Probation counselors oversee the completion of court-mandated treatment programs and counseling. DV offenders are required to report in person each month until they demonstrate consistent compliance with their treatment plan. Judges may also mandate additional interventions such as DV treatment, substance abuse counseling, parenting classes, or sexual deviance therapy. Source: https://www.seattle.gov/courts/programs-and-services/specialized-courts/domestic-violenceintervention-project/what-happens-in-cases-of-domestic-violence

In cases in which the responding officers determine that the offense was in fact DV, the law in Washington state requires that they make an arrest if they have probable cause to believe that an assault took place within four hours prior to their arrival ¹⁵. Arrest is also mandatory in cases in which an offender breaks a no-contact order. In every other case, arrest is discretionary. In my data, I are able to precisely distinguish between cases in which officers arrested the offender because they reported that the characteristics of the incident meant it was mandatory for them to do so and when they claimed that it was a discretionary decision. In the case an arrest is made and charges are filed, the victim does not have the authority to drop them.

3 Data and Empirical strategy

Drawing on detailed administrative data from the Seattle Police Department (SPD) from 2012 to 2023, I compare domestic violence related calls for service in which at least one female officer was dispatched to those in which all the responding officers were male. My identification strategy relies on as-good-as-random variation in officer assignment to 911 calls, which stems from the way in which officers are assigned to calls.

3.1 Data and Outcomes of Interest

I have detailed administrative data from the Seattle Police Department obtained through a research agreement. The data includes the universe of all calls for service from 1/1/2012 to 12/31/2023, and I am able to follow incidents from the time the call is placed until the call is cleared by police. Specifically, I have three datasets that can be linked through unique identifiers.

The first is data on each call. For each call, I observe the exact date and time when it

¹⁵If the officer determines that two or more parties assaulted each other, the officer will arrest only the person believed to be the primary aggressor.

was placed, as well as when each officer was dispatched, when and how the call was cleared, and geographic information on where the call was coming from that includes the beat and blurred latitude and longitude ¹⁶. Importantly, I am also able to see how the call taker classified the incident when the call was first placed and the reclassification by officers. ¹⁷

The second is data on officers. I have information on every police officer that was dispatched to each call, including a unique officer identifier that allows me to follow officers over time in different incidents. I also know their race, gender, and year they joined the police force. From 2015 onward, I know where in the city any given officer was assigned to patrol on any given day and during which shift.

Finally, I am also able to identify, for each call for service, whether officers reported the incident as a crime or claimed it was a civil matter. ¹⁸ For the subset of incidents that officers reported as a crime, I further have the exact address where the incident took place, as well as demographic information on victims and offenders that includes their gender, race and age. While I only have access to the gender of the complainant in the cases that were reported as crimes, since most victims of domestic violence are women, I view the results as largely representing differential response by officer gender to incidents involving female victims.

I use this information to study service provision along several dimensions. The first of these is the final classification of the incident, as determined by the team of responding officers. As previously mentioned, once at the scene and after conducting an investigation, police officers can determine that the DV label assigned by the call taker is incorrect because

¹⁶The blurred coordinates place us at the middle of the street where the incident took place.

¹⁷The responding officers must assign such classification immediately after leaving the scene and before becoming available to respond to other calls.

¹⁸Once police arrive at the scene, the first thing they do is conduct an investigation to determine whether a crime has been committed. If they determine that it was, they will write a criminal report detailing what crimes were committed and why they came to that conclusion; if they determine that no crime took place, then they write an incident report in which they detail the situation

the incident was not actually DV. Second, I examine whether the incident is reported as a crime, or if instead, the responding officers claimed that the incident was a civil matter ¹⁹. In the latter, charges cannot be filed charges against the offender. Finally, I will also consider whether an arrest is made at the scene. Recent literature (Amaral et al., 2023, Chin and Cunningham, 2019) has shown that arresting the offender can lead to reduced future victimization.

Table 1 summarizes the data. The first column covers the full sample of 911 calls that the call taker classified as domestic violence, while Column 2 restricts the sample to calls in which at least one female officer was dispatched; and Column 3 to the calls in which only men were dispatched.²⁰. The sample includes 98,644 calls for service that were classified as DV by the call taker. Of these, 19.6% had at least one female officer initially dispatched ²¹ Incidents featuring at least one female officer are of similar priority and occur in census block groups with comparable demographic characteristics. Additionally, there is no significant difference in the likelihood of teams including a racial minority when at least one female officer is present. However, teams with at least one female officer do tend to have officers with slightly less patrol experience on average $(7.7 \text{ years compared to } 8.6 \text{ years})^{22}$. I note that the average number of officers dispatched is higher in incidents that feature at least one female officer, a mechanical outcome given that only approximately 14.5% of patrol officers are female. To address this, in the research design, I will include a fixed effect for the number of officers dispatched. The final three rows of Table 1 show that teams including at least one female officer are more likely to classify incidents as domestic violence, report incidents as crimes, and arrest suspects on the scene. These differences are formally tested in Section 4.

¹⁹Appendix Figure A.II shows the percent of cases classified as domestic violence by the call taker that the officers reported as crimes, separately by whether the cases retained the DV label. It shows how the cases for which the DV label is removed are also those least frequently reported as crimes.

²⁰To define this sub-samples, I use only the officers that were initially dispatched, as the decision to ask for backup can be endogenous.

²¹This is higher than the percent of female officers on the force (which in my period of analysis is approximately 14.5%) because female officers are not equally distributed across the city. Appendix Figure A.III shows the percent of calls where at least one female officer was initially dispatched on each beat in the city

 $^{^{22}}$ Given this, I control for the average experience of teams in robustness checks in Section 5.1

3.2 Regression Model

The identification strategy relies on as-good-as-random variation in the gender composition of responding officers. Specifically, I rely on the assumption that conditional on sectorby-time fixed effects, the gender composition of responding officers should be as good as random. I believe that this assumption is reasonable given the dispatching procedures that are in place in Seattle. I also empirically validate it to assess the validity of the research design. In order to estimate the effect of having at least one female responding officer in domestic violence calls for service, I estimate the following model:

$$Y_i = \beta_0 + \beta_1 \mathbb{1} \{ \text{Has Female Officer} \}_i + \delta_{symw} + \gamma_s + \gamma_n + \epsilon_i$$
(1)

Where Y_i represents the different outcome variables. The main outcomes of interest are whether the final classification by the officers includes the DV label, whether the incident is reported as a crime, and whether an arrest is made at the scene. $\mathbb{1}{Has \ Female \ Officer}_i$ is an indicator that is equal to one when, among the responding officers that were first dispatched, there is at least one woman. δ_{symw} are sector-by-year-by-month-by-week fixed effects, and γ_s are shift fixed effects. γ_n corresponds to a fixed effect for the number of officers that were initially dispatched, 23 which I include because the higher the number of officers dispatched, the greater the likelihood that there will be at least one female officer. Standard errors are clustered at the level of the team of responding officers to allow observations to be correlated across cases for a particular team of responding officers.

 $^{^{23}}$ When cleaning the data, I exclude incidents with extreme values of this variable. Specifically, I drop observations in the top 1% in terms of number of officers first dispatched. This leaves us with 99% of incidents, all of which had either 1, 2 or 3 officers first dispatched.

3.3 Evidence of Conditional Random Assignment

The process described in Section 2.1 that determines officer assignment suggests conditional random assignment of officers to calls. Specifically, it suggests that sector-by-time fixed effects should isolate as-good-as-random variation in the gender of the first dispatched responding officers. In this subsection, I empirically test the validity of my research design in a few different ways. Since the selection of officers to calls through which I expect to have conditional random assignment only applies to the initially dispatched officers, I restrict my attention to these officers. Hence, I define an incident as having at least one female officer if there is at least one female officer among the officers initially dispatched.

While the dispatcher's main concern should, according to the dispatch center, ²⁴ be to dispatch an officer as soon as possible, one might be concerned that when the call is related to DV, dispatchers could prioritize sending a female officer instead. I test whether incidents related to domestic violence are more likely to have a female officer dispatched, as opposed to only men, than other incidents. I follow equation (1) and regress an indicator for whether at least one of the officers in the car was a female, while controlling for sector-year-month-week fixed effects and shift fixed effects. Table 2 shows the results from this test, and it shows how domestic violence calls are not more likely than any other call to get a female officer assigned. The coefficient is economically small and is not significant at conventional levels.

Although it does not appear that female officers are selectively sent to calls related to domestic violence, one might still be concerned that the type of domestic violence incidents to which at least one female versus only male officers get dispatched are different in nature. To address this concern I compare the characteristics of the domestic violence calls where at least one female officer was sent to those in which only men were sent. I use the call priority assigned by the call taker and the time (measured in seconds) between when the call came

 $^{^{24}}$ This information was shared with me when I spoke to a 911 operations manager from SPD

in and when the first officer(s) were dispatched. Further, since demographic characteristics of the victim and suspect are only recorded when the officers classified the incident as a crime, I rely on demographic characteristics at the census-block-group level from where the call came from the 2016 American Economic Survey .²⁵ Specifically, I consider the percent of the census block group where the call originated that is female and non-Hispanic white, as well as the unemployment rate. For this test, I use equation (1) 3.2 and the universe of calls for service assigned to DV label by the call taker. The results of this test, which can be found in Table 3, show that the characteristics studied are balanced between cases with and without at least one female officer. The coefficients are not only statistically insignificant but also small in magnitude, which is consistent with random assignment of officers to calls.

4 Results

4.1 Main Results

Table 4 shows the results from estimating Equation (1) on whether the final classification of the incident is domestic violence, whether the incident is recorded as a crime, and whether an arrest is made on the scene. It should be noted that while I do not have access to the gender of the complainant in cases in which the incident was not reported as a crime, given that most victims of domestic violence are women (Catalano, 2012), I view the results to be largely representing differential response by officer gender to incidents involving female victims.

Focusing first on Column (1), I see that dispatching at least one female officer to DV calls increases the probability that the final classification will remain DV by 1.65 percentage points, an effect of 2.8% with respect to the mean of male-only teams. This indicates a higher willingness of teams that include female officers to formally record incidents as DV, with all the consequences that this entails. These include higher expected sanctions for offenders

 $^{^{25}}$ There were 482 census block groups in Seattle in 2016

and more targeted resources for victims. In the state of Washington, a conviction with a DV designation carries additional penalties such as the loss of gun rights (even if convicted of a misdemeanor) and having to undergo treatment for domestic violence. Furthermore, a misdemeanor DV charge is automatically upgraded to a felony if the offender has at least two previous convictions for other DV crimes (such as for assault or harassment) within the previous ten years.

Turning to Column (2), I see that the likelihood that the responding officers will report the incident as a crime is also increased by the presence of at least one female officer. Specifically, this probability increases by 0.86 percentage points, which corresponds to a 2.7% increase with respect to the mean. Conversely, when only men report to the scene of a DV call, they are more inclined to view the situation as a civil matter that does not require police intervention. This is consistent with findings in Chu and Sun (2014), who using survey data found that male officers were more likely than female officers to support minimum police involvement and to tolerate domestic violence. This result is also in line with Sukhtankar et al. (2022), who, in the context of dedicated spaces for women in Indian police stations, find that registering of offenses is more likely when female officers run the desks. Domestic violence is a notoriously underreported crime, with less than half of violent victimizations being reported to police (Morgan and Truman, 2019). This result suggests that dispatching at least one female officer, rather than only men, can help alleviate this problem, both by increasing the probability that the crime is reported and by signaling to victims that their case is taken seriously, which might in turn increase the probability that they choose to report future victimization.

Finally, Column (3) shows that the gender composition of the responding officers does not appear to make a difference in the overall likelihood of an arrest being made at the scene. One possible explanation for the lack of differences in the probability of an arrest being made is that for some of these incidents, arrest is mandatory. That is, if officers believe that an assault related to DV took place at most 4 hours before they arrived, then Washington State law dictates that officers must arrest the perpetrator. To determine whether this indeed explains the null result found for arrests, and to better understand the dynamics behind the results found on reporting and final classification, I next split the sample of DV calls by the level of discretion awarded to officers.

4.2 Heterogeneity by Level of Officer Discretion

I disaggregate cases into two different subcategories of DV incidents: those related to assaults or to protective orders and those related to disturbances or threats. In order address endogeneity, when defining the two subgroups, I rely on the classification made by the call taker. The first of these, which represent roughly one-third of incidents classified as DV by the call taker, are more severe in nature, and consequently, officers have limited discretion when deciding whether to arrest the perpetrator. The second category which represent roughly two-thirds of incidents classified as DV by the call taker are less severe, and thus, officers will have greater leeway and be able to use discretion when deciding whether or not to arrest the offender or not. ²⁶

Table 5 shows the results of this exercise. Each panel reports the results of each of the outcomes of interest for each subcategory of DV, and it shows how disturbances or threats, which are the least severe offenses and where officers have the greatest discretion, is where the effects appear to be strongest. Panel A shows that when at least one female officer is dispatched to DV calls, the likelihood of the final classification of the incident also being DV increases by around 2.2 p.p. and 1.5 p.p. for disturbances/threats and assaults/protective orders, respectively. Given the difference in means of the dependent variable for each cate-

²⁶In the case of assault, the law requires that officers arrest the perpetrator if they have reason to believe that an assault took place within the last four hours. This means that officers will have little leeway here: if they believe that they do not have enough evidence of an assault taking place, even if the call taker believed so, or if the assault took place over 4 hours before they arrived at the scene. However, the discretion they have in these cases will be significantly lower than in cases where the call was related to a disturbance or threats.

gory, however, the implied percent effect is significantly larger in the case of disturbances or threats. Turning to Panel B, I see that the effect of having a female officer on the likelihood that the incident will be reported as a crime is 1 p.p. for disturbances or threats. This amounts to an effect of 4.9% with respect to the mean of male-only teams. For assaults or breaking protective orders, instead, I having a female officer increases the likelihood of a criminal report being written by 1.3 p.p., which amounts to a 2.3% increase, although the effect is not significant at conventional levels and less than half the magnitude of the effect found for the less severe forms of DV. Finally, Panel C shows that while there was no overall effect of having a female officer on an arrest being made at the scene, this was in fact due to the cases in which arrest was mandatory. Looking at these cases where the law dictates that an arrest be made reveals a coefficient that is negligible in magnitude and not significant. Instead, when the call was related to a disturbance or threat, where there is greater discretion, the likelihood of an arrest being made does vary depending on the gender composition of officers. Specifically, having at least one female officer increases the probability of an arrest being made at the scene by 0.61 p.p. Given that only 7.8% of these incidents result in an arrest, this effect represents 7.9% of the mean.

These results are in line with the notion that that female officers tend to take less severe forms of domestic violence more seriously than their male counterparts, who are more inclined to dismiss these incidents as not constituting domestic violence or even crimes.

4.3 Effect on Recidivism

Given that teams with female officers are more likely to report the incident as a crime and arrest the suspect (in the case of disturbances or threats), which are precisely the actions that research has shown to reduce recidivism (see Black et al., 2023 and Amaral et al., 2023 for some examples), I next explore whether female officers affect the likelihood of a future incident of domestic violence taking place (i.e. of recidivism).

Since I do not have a unique ID for each victim, to study recidivism, I leverage the address where the incident occurred. The addresses to which I have access to are blurred to represent the middle of the street where the incidents took place. I define future victimization as the occurrence of at least one other incident that is also exogenously classified as DV by the call taker at a later date at the same blurred address. It should be noted that the results from this section should be interpreted with caution, as a lower (higher) likelihood of a future call could also reflect a lesser (greater) willingness to report by the victim. However, given past literature (Miller and Segal, 2019, Sun, 2007 among others), I would expect the future likelihood of reporting to, if anything, increase after an experience with a female officer.

In Figure A.IV, I test whether there are any raw differences in the probability of a subsequent incident of domestic violence (as defined by the call taker) when at least one female officer was dispatched to the original incident. To do so, I create indicator variables for each incident that takes value 1 if there was another incident of DV (as classified by the call taker) at the same blurred address within x days following the original incident, where $x \in [0, 30]$. Then, the average for each day is calculated separately for incidents where at least one female officer responded and incidents in which every responding officer was male. The figure shows that for most days following an incident, the probability of there being a subsequent incident is lower if there was a female officer present. In Table 6, I formally test for these differences.

Table 6 shows the results on the short term of dispatching at least one female officer. Each column tests for the incidence of another call for DV at the same address within $t \in \{15, 30, 60\}$ days of the original call. I focus on this time frame because the longer the time span considered is, the higher the likelihood that the victim might have moved and thus of overassigning repeat offenses. In Appendix Tables A.I and A.II, however, I show the results over longer time periods. Columns 1 and 2 of Table 6 show that when at least one female officer is dispatched, the likelihood of a future call for DV within 15 and 30 days is reduced by 0.6 and 0.8 p.p., respectively. These effects correspond to 2.9 and 2.7% with respect to their means. Columns 3–5, however, show that these effects are not sustained over longer periods. Table 7 instead shows the results after splitting the one-year time interval into days 1–15, days 16–30 and days 31–60.

5 Mechanisms and Robustness

In this section, I test the robustness of the main results and explore the mechanisms driving them. I begin by testing whether the main results are robust to the inclusion of officer controls. I then test the robustness of the empirical model by controlling differently for the geography and time fixed effects that should allow me to isolate as-good-as random variation in the gender of the responding officers. To understand whether the results are due to female officers consistently policing differently or if instead they only recognize and respond differently to specific dynamics in DV cases, I analyze the behavior of teams of responding officers that include women during incidents not classified as DV by the call taker. I also test whether teams with female officers exert more effort when handling DV cases.

5.1 Robustness

I test the robustness of the results in two different ways. I first add controls for other officer characteristics. Namely, I control for whether at least one of the officers is not white non-Hispanic, as well as for the average experience of the team of responding officers. The experience of each officer is calculated as the number of days between when the officer joined the force and when the incident took place. ²⁷

I find that adding these controls does little to change the implied effects of having at least one female officer dispatched. Figure 2 plots the coefficient from the variable *has female officer* for each of the main outcomes, as well as for the universe of all DV-related

²⁷In both the calculation of the average experience and the presence of a racial minority, I only consider the officers that were first dispatched to the scene.

calls (in green), and for disturbances or threats and assaults or protective orders (in blue and orange, respectively). The results including the coefficient for having at least one minority officer and of the average experience of the officers can be found in Table 2. ²⁸ Having at least one minority does not seem to affect the probability of the final classification being DV, of a criminal report being written, or of an arrest being made at the scene. The average experience, on the other hand, does seem to matter: When the responding officers have been on the job for longer, the likelihood that the final classification is DV, that the incident is reported as a crime, and that there is an arrest on the scene is lower. Nevertheless, and despite the fact that female officers are less experienced on average, the effect of having at least one female officer remains largely unchanged.

Relatedly, we might also wonder whether the observed effects are due to gender diversity specifically or if diversity across other dimensions could produce similar results. To address this, I examine whether teams including at least one officer that is not white non-Hispanic handle domestic violence cases differently from all-white teams. These results can be found in Table A.VII and show that there is no significant difference in how they handle DV cases. This suggests that gender diversity, rather than diversity in general, is the relevant factor.

I then also test whether the results are robust to alternative specifications of the model. My empirical strategy relies on the assumption that conditional on geography and time fixed effects, I should be able to isolate as-good-as-random variation in the gender of responding officers. My preferred specification does so by including sector-year-month-week fixed effects and shift fixed effects. However, one might control for geography and time in different ways, and I show that results remain largely unchanged when I do so. The top-left panel of Figure 3 shows that adding fixed effects for the beat from where the call originated has little effect on the estimated coefficients of the effect of having at least one female responding officer. Furthermore, the top-right panel shows that the results are also robust to allowing the effect of the shift during which the call took place as well as the effect of the number of officers

 $^{^{28}}$ I define an officer as belonging to a racial minority if they are not White non-Hispanic.

to vary by police sector. Finally, the bottom panel shows that separately controlling for sector-year-month fixed effects and week fixed effects (as well as number of officers and shift fixed effects, as in the main specification) also does little to change the results obtained previously.

5.2 Mechanisms

5.2.1 Baseline Behavior of Female Officers

I test whether female officers handle *every* call for service differently than their male counterparts or if their differential responses are particular to cases they were told were related to DV according to the call taker. To do so, I begin by examining the subset of calls for service that are or could be violence between one or more people but that did not get assigned the DV label by the call taker. This includes cases classified by the call taker as assaults, disorder, threats and fights. I then study the behavior of female officers in the remainder of calls that were not classified as DV by the call taker. Appendix Tables A.III and A.IV test for conditional random assignment of officers to these calls and shows that the characteristics of calls that get assigned at least one female responding officer do not differ from those that do not ²⁹.

Tables 8 and 9 show the results of these exercises. Starting with Table 8 and focusing on Column 1, when at least one female officer is dispatched to incidents of violence that were not classified as DV by the call taker but are interpersonal violence, the final classification is more likely to change to include the domestic violence label. The magnitude of 0.031 p.p. implies a 10.5% increase in the probability of the incident being classified as DV. This implies that the increased likelihood of female officers maintaining the DV label, as shown in Table 4, is not merely due to their tendency to follow the call taker's classification. Instead, this result is consistent with the idea of female officers being more willing than their male counterparts to label domestic violence as such, regardless of whether the call taker did, with

 $^{^{29}}$ The only characteristic for which the difference is statistically significant is the percent of the census block where the incident took place that is unemployed. However, it is only significant at the 10% level, and the coefficient of 0.01 percentage points is not economically significant.

all that this entails for victims and perpetrators. Furthermore, it also points to the fact that teams with female officers might be more likely to catch type 2 errors in the classification by the call taker. Column 1 of Table 9 shows that also in cases that are not related to interpersonal violence, teams with female officers are still more likely to add the DV label. However, these are very rare events 30 .

When looking at whether the incident is reported as a crime, I also see that this is 6.4% more likely to occur if there is a female officer dispatched in cases of interpersonal violence and 6.3% more likely to occur in other non-DV incidents. The fact that this effect is similar in magnitude to that found for disturbances related to DV and even larger than that found for all DV implies that the results found for domestic violence are not driven by female police officers changing their reporting practices when encountering domestic violence incidents. Instead, it would appear that female officers' baseline behavior involves reporting incidents as crimes at a higher rate than their male counterparts. This means teams with female officers take *every* incident more seriously. Although this result is not particular to DV cases, domestic violence victims still benefit from at least one female officer being assigned.

Finally, when examining arrests made at the scene, I find that the behavior of teams including female officers does not differ significantly from that of all-male teams. Since the decision to make an arrest when handling these incidents is discretionary, this indicates that the use of discretion in non-DV cases does not vary depending on the gender composition of the team of responding officers. This in turn implies that the higher likelihood of arrests found in discretionary domestic violence cases is due to teams with female officers altering their arresting behavior when responding to domestic violence calls.

Even though arrest is not mandatory in cases of assault not related to domestic violence,

³⁰The most common initial classifications in this subsample to which the DV label is added include cases of unknown nature and peace–standby (these are cases in which police are present while parties in civil litigation exchange property or one of the parties is allowed to enter a residence or vehicle to obtain property)

and thus officers have discretion in all of the incidents analyzed in this section, ³¹ it might be still be the case that teams of officers that include women only differ in their arresting behavior when the case is related to a disturbance or threat. This would imply that the results found for arrests in DV-related disturbances in Table 5 would not reflect a change in behavior when handling DV cases but instead that the severity at the time of the call is the relevant parameter. In order to understand whether this is the case, I also separately analyze disturbances or threats not related to DV. Table A.V shows the results of this exercise, and shows that, in these cases, the likelihood of the offender being arrested does not vary by the gender composition of responding officers, confirming that the results in Table 5 are unique to disturbances or threats that are DV related.

5.2.2 Effort

The results found in Section 4.1 are consistent with the idea of female officers taking calls for service for domestic violence more seriously than their male counterparts and, thus, exerting comparatively more effort when dispatched to these incidents. In this subsection, I directly test this claim. I use two different proxies for effort: The amount of time officers stay on the scene and whether, in addition to listing the main offense, officers also include further minor offenses in their criminal reports.

A key decision that officers will have to make once at the scene is how much information to gather and how thoroughly to investigate the incident. For instance, they can choose whether to actively search for potential witnesses, how meticulously to examine the scene, and the thoroughness with which they interview those involved. Officers who engage in these activities will naturally spend more time at the scene. Therefore, how long officers remain at the scene can be used as a proxy for the amount of effort exerted.

 $^{^{31}}$ Given that some incidents get classified as DV by the officers but not the call taker, some of the assaults analyzed in this section might actually have called for a mandatory arrest after the officers determined that DV was at play. However, this only happens in less than 3% of cases.

I define time at the scene as the number of minutes that pass between when the first officers arrive on the scene and when the incident is cleared (which corresponds to when officers have left the scene and are ready to be dispatched to another call). Using the full universe of DV calls, I show that having at least one female officer on the team increases the time officers spend on the scene by 4%, as shown in Column 1 of Table 10. Columns 2 and 3 break down the full sample of DV calls into those cases related to disturbances or threats and assaults or breaking of protective orders, respectively. They indicate that the effects are present and similar for both types of offenses. Recall that for the subsample of DV cases related to disturbances or threats, teams of female officers were also more likely to write a criminal report against the perpetrator and to arrest them. This might mechanically explain the 4.53% additional time spent at the scene for these offenses. However, the fact that teams with female officers also spend more time at the scene in cases of assaults or protective orders (where they are not arresting perpetrators at a differential rate with respect to teams of only men and display a relatively small difference in reporting) implies that the arresting behavior alone cannot explain this result. Therefore, these results are consistent with the notion of teams with female officers exerting more effort at the scene and providing better service to victims of domestic violence.³²

Once officers determine that a criminal report is warranted, they next need to decide how many crimes to list in their report. Listing multiple offenses in the criminal report is among the most important optional actions responding officers can take to increase the likelihood of prosecution, especially when it comes to domestic violence cases. (Ferguson and Douglas, 2016, Nelson, 2013³³)

In the data, in cases with only one crime listed in the criminal report, the most common crime listed is "Assault Non-Aggravated DV". When instead multiple crimes are listed, the

 $^{^{32}}$ Results in levels instead of logarithms cam be found in Table A.VIII

³³This was also confirmed to us by a coordinator of law enforcement training from the Rhode Island Coalition Against Domestic Violence.

most common additional crimes are "Violation of DV Order", "Property Damage", and "Interfere with Report DV". ³⁴ In this subsection, I compare the likelihood of multiple charges being listed in police reports, conditional on a criminal report being written, by the gender composition of responding officers. In order to do so, I create a variable *Multiple Offenses Listed* that takes value 1 if more than 1 offense was listed in the criminal report and zero when only one offense was listed. Note that this variable is not defined in cases in which the responding officers claimed that no crime took place, which means that I will be conducting this analysis for the subset of calls for service that resulted in a criminal report being written.

Table 11 shows the results from this analysis for the full sample, the subset of DV calls that the call taker classified as disturbances or threats, and for the subset of DV calls that the call taker classified as either assaults or breaking of a protective order. I see that, when at least one female responding officer is dispatched, the probability that multiple offenses are listed (provided that a criminal report is written) increases by 2.22 pp, an effect that corresponds to 10% with respect to the mean of the dependent variable. Focusing on Columns 2 and 3 reveals that this effect is driven by differences in cases that the call taker classified as disturbances or threats, which corresponds to the least severe cases in my sample. For this subset of calls, the presence of at least one female officer increases the probability of multiple charges being listed by 5.26 pp, which amounts to an effect of 22.9%. For assaults and breaking of protective orders, the coefficient is considerably smaller in magnitude and not significant at conventional levels. For incidents related to disturbances/threats, there may be less physical evidence compared to assaults or violations of protective orders. Consequently, these cases —- often reliant on one person's word against another's -- might particularly benefit from listing multiple charges, especially those such as property damage, for which physical evidence is more likely to be present. This approach could be crucial for holding the perpetrator accountable and advancing prosecution.

 $^{^{34}}$ This corresponds to the offender committing domestic violence and preventing or attempting to prevent the victim or a witness of the crime from calling 911, obtaining medical assistance, or making a report to any law enforcement official.

I test the robustness of the results to additional controls, specifically for officers' experience. First, I control for the average experience of the team of responding officers. I then control for an indicator variable that equals one if at least one of the responding officers had been working patrol for less than a year at the time of the incident. These controls address the concern that teams with female officers are, on average, somewhat less experienced and that inexperienced teams might spend more time on scene not due to additional effort but due to a need for additional caution. Figure A.V shows that the results remain largely unchanged.

As previously mentioned, the SPD does not record the gender of the complainant in cases deemed civil matters by patrol officers. However, this information is available when a criminal report is written. Thus, I can break down the results found in Table 11 by victim gender. The results of this exercise can be found in Table 12. Panel A shows the results when at least one of the victims was a woman, while Panel B restricts the sample to cases in which all the victims were male ³⁵. I can see that the effects appear to be concentrated in cases in which there is a female victim.

One might also wonder whether teams with female officers exert more effort *only* in cases related to domestic violence. Tables A.IX and A.XII shows the results for cases that were classified as violence between two or more people (assaults, fights, threats, disturbances) but not related to DV by the call taker, as well as for all other calls not related to DV, respectively. They show that, when considering all incidents, teams with female officers appear to stay longer. However, among these incidents, there is a disproportional amount of cases in which officers stay for less than one minute, claiming either that they could not find the incident or that they provided assistance. Once we restrict to incidents in which officers stay for at least one minute, the results change significantly. For cases that are interpersonal violence, teams with female officers stay for longer, but the effect is considerably smaller

 $^{^{35}}$ Some of these male victims could be underage

than for DV cases and only significant at the 90% level; while for nonviolent non-DV cases, there is no difference in the time spent at the scene. ³⁶. When it comes to listing multiple charges in their criminal reports, teams with female officers do not appear to do so more in cases of violence between two or more people, but they do when it comes other cases not related to DV. However, the rate is one-fourth that of disturbances or threats related to DV.

I further corroborate that the main findings are driven by teams with female officers treating DV cases differently and exerting comparatively more effort, rather than, for example, the victim being more prone to cooperate if there is a female officer present. To do so, I differentiate between cases in which the female officers were the most experienced on the team and cases in which the male officers were the most experienced. The underlying assumption is that the most experienced officer among the first responders is the officer with the greatest influence on final classification, reporting, and arresting decisions. Thus, if it were the case that the results are driven by the victim being more comfortable talking to police when there is a female officer, then we should observe the same results regardless of whether the female officer is the one making the decisions. On the other hand, if the results were driven by officers deciding to handle the case differently, then the effects should be concentrated among the incidents where the female officers were the most experienced. Figure A.VI shows evidence consistent, for the most part, with the former hypothesis. For final DV classification and arrest on the scene, and to a minor extent for reporting as a crime, the effects are larger and more significant when female officers are those with the greatest authority on the scene. This suggests that while victims feeling more comfortable and being more cooperative may play a role, it cannot fully explain the results. Ultimately, the decisions of female officers do differ, and such differences matter for DV outcomes.

The findings in this section highlight an important difference in how teams with female officers handle calls for domestic violence. The increased time spent at the scene, along

 $^{^{36}}$ Table A.XI shows that restricting to incidents in which officers stay at least one minute for the DV sample does little to affect the results.

with the greater tendency to list multiple offenses when writing police reports, suggests that they approach these calls with more care and more thoroughly than their male counterparts, which can help explain the differences found in tendencies to report incidents as crimes and arrest perpetrators. These actions can also serve as a signal to victims that their case is taken seriously.

6 Conclusion

In this paper I study the effect of dispatching at least one female officer to incidents of domestic violence using detailed administrative data from Seattle. To address endogeneity, I exploit conditional random assignment of officers to calls and focus on incidents classified as domestic violence by the call taker. The results show that teams that include female officers take these incidents more seriously and they are more likely to get involved. Specifically, the exogenously given DV classification is more likely to remain and incidents are more likely to be reported as crimes when a female officer responds. Furthermore, in incidents where officers have the greatest discretion, there is a higher likelihood of an arrest being made. These differences contribute to lower rate of recidivism in the short run when a female officer responds.

I also find that differential treatment of incidents extends beyond domestic violence. Even in cases that were not classified as DV by the call taker, when at least one female officer is dispatched, the probability that the incident is taken seriously, as measured by the officer's decision to report it as a crime, is higher. In the subset of these cases that are related to interpersonal violence, I further show that teams with female officers are more likely to add a DV label to the classification, confirming greater willingness among female officers to classify incidents as domestic violence.

These findings suggest that female officers may bring a different perspective to policing by taking a more serious and thorough approach to all types of incidents. By examining the differential behavior of police based on gender, I can explore the complexities of policing activities and provide evidence of *why* gender diversity in police departments is important and should be increased. The differential treatment of cases appears to be particularly important in domestic violence incidents, leading to more consistent and serious treatment of these cases, which proves beneficial, as evidenced by the lower rates of future victimization. My results highlight that although female officers are not currently dispatched selectively to domestic violence incidents, perhaps they should be.

References

- Aizer, A. (2010). The gender wage gap and domestic violence. American Economic Review 100(4), 1847–1859.
 - Aizer, A. and P. Dal Bo (2009). Love, hate and murder: Commitment devices in violent relationships. *Journal of Public Economics* 93(3–4), 412–428.
 - Alesina, A., B. Brioschi, and E. La Ferrara (2016). Violence against women: A cross-cultural analysis for africa. Technical report, National Bureau of Economic Research.
 - Amaral, S., G. B. Dahl, V. Endl-Geyer, T. Hener, and H. Rainer (2023). Deterrence or backlash? arrests and the dynamics of domestic violence. Technical report, National Bureau of Economic Research.
 - Antonovics, K. and B. G. Knight (2009). A new look at racial profiling: Evidence from the boston police department. *The Review of Economics and Statistics* 91(1), 163–177.
 - Anwar, S. and H. Fang (2006). An alternative test of racial prejudice in motor vehicle searches: Theory and evidence. *American Economic Review* 96(1), 127–151.
 - Bhalotra, S., D. GC Britto, P. Pinotti, and B. Sampaio (2021). Job displacement, unemployment benefits and domestic violence.
 - Black, D. A., J. Grogger, T. Kirchmaier, and K. Sanders (2023). Criminal charges, risk assessment, and violent recidivism in cases of domestic abuse. Technical report, National Bureau of Economic Research.
 - Cabral, M. and M. Dillender (2024). Gender differences in medical evaluations: Evidence from randomly assigned doctors. *American Economic Review* 114(2), 462–499.
 - Card, D. and G. B. Dahl (2011). Family violence and football: The effect of unexpected emotional cues on violent behavior. *The quarterly journal of economics* 126(1), 103–143.

- Catalano, S. M. (2012). *Intimate partner violence, 1993-2010*. US Department of Justice, Office of Justice Programs, Bureau of Justice
- CDC (2024). About intimate partner violence. Accessed: 2024-06-06.
- Chin, Y.-M. and S. Cunningham (2019). Revisiting the effect of warrantless domestic violence arrest laws on intimate partner homicides. *Journal of Public Economics* 179, 104072.
- Chu, D. C. and I. Y. Sun (2014). Reactive versus proactive attitudes toward domestic violence: A comparison of taiwanese male and female police officers. *Crime & delin*quency 60(2), 216–237.
- Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? American Economic Review 95(2), 158–165.
- Erten, B. and P. Keskin (2024). Trade-offs? the impact of wto accession on intimate partner violence in cambodia. *Review of Economics and Statistics* 106(2), 322–333.
- Federal Bureau of Investigation (2017). Crime in the united states, 2017: Table 74. full-time law enforcement employees by population group. Retrieved from https://ucr.fbi.gov/ crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/tables/table-74.
- Ferguson, C. J. and J. E. Douglas (2016). Investigating domestic violence: Raising prosecution and conviction rates. *FBI Law Enforcement Bulletin*.
- Goncalves, F. and S. Mello (2021). A few bad apples? racial bias in policing. American Economic Review 111(5), 1406–1441.
- Hoekstra, M. and C. Sloan (2022). Does race matter for police use of force? evidence from 911 calls. *American economic review* 112(3), 827–860.
- Iyengar, R. (2009). Does the certainty of arrest reduce domestic violence? evidence from mandatory and recommended arrest laws. *Journal of public Economics* 93(1-2), 85–98.

- Johnson, D. J., T. Tress, N. Burkel, C. Taylor, and J. Cesario (2019). Officer characteristics and racial disparities in fatal officer-involved shootings. *Proceedings of the National Academy of Sciences of the United States of America* 116(32), 15877.
- Kennedy, D. B. and R. J. Homant (1983). Attitudes of abused women toward male and female police officers. *Criminal justice and behavior* 10(4), 391–405.
- McCrary, J. (2007). The effect of court-ordered hiring quotas on the composition and quality of police. *American Economic Review* 97(1), 318–353.
- Miller, A. R. and C. Segal (2019). Do female officers improve law enforcement quality? effects on crime reporting and domestic violence. *The review of economic studies* 86(5), 2220–2247.
- Morgan, R. E. and J. L. Truman (2019). Criminal victimization, 2018. Bureau of Justice Statistics 845, 11–18.
- Nelson, E. L. (2013). Police controlled antecedents which significantly elevate prosecution and conviction rates in domestic violence cases. *Criminology & Criminal Justice* 13(5), 526–551.
- Rivera, R. (2022). The effect of minority peers on future arrest quantity and quality. Technical report, Technical report.
- Stalans, L. J. and M. A. Finn (2000). Gender differences in officers' perceptions and decisions about domestic violence cases. Women & Criminal Justice 11(3), 1–24.
- Sukhtankar, S., G. Kruks-Wisner, and A. Mangla (2022). Policing in patriarchy: An experimental evaluation of reforms to improve police responsiveness to women in india. *Science* 377(6602), 191–198.
- Sun, I. Y. (2007). Policing domestic violence: Does officer gender matter? Journal of Criminal Justice 35(6), 581–595.

United States Census Bureau (2017). American community survey: 2016.

- Weisburst, E. K. (2022). "whose help is on the way?": The importance of individual police officers in law enforcement outcomes. *Journal of Human Resources*.
- West, J. (2018). Racial bias in police investigations. Retrieved from University of California, Santa Cruz website: https://people.ucsc.edu/jwest1/articles/West RacialBiasPolice.pdf.
- World Population Review (2024). Seattle, washington population 2024. https://worldpopulationreview.com/us-cities. Accessed: 2024-10-28.
- Ye, H. and J. Yi (2023). Patient-physician race concordance, physician decisions, and patient outcomes. *Review of Economics and Statistics* 105(4), 766–779.

7 Tables and Figures



Figure 1: Map of Seattle Police Beats, Sectors, and Precincts

Notes: This figure shows a map of the 51 police beats contained in the 17 sectors that are themselves contained in the 5 police precincts in Seattle. Each color depicts a precinct, while each shade of each color depicts a sector. The beats are labeled. Map obtained from the Seattle Police Department website: https://www.seattle.gov/police/information-and-data/data/tweets-by-beat



Figure 2: Robustness to Officer Controls

Notes: This figure shows the robustness of the main results to the inclusion of officer controls. It plots the coefficient for the variable has female officer for different regressions. Officer controls refers to a dummy variable that takes value one when at least one of the responding officers belonged to a racial minority, as well as the average experience in years of the team of responding officers. Full sample corresponds to the entire universe of calls for service that were classified as domestic violence by the call taker. Disturbances or threats corresponds to the subset that the call taker classified as disturbances or threats related to domestic violence. Assaults or protective orders corresponds to the subset of calls that the call taker classifies as assaults or breaking of protective orders related to domestic violence. Standard errors are clustered at the level of the team of responding officers initially dispatched to the scene. The confidence intervals correspond to the 95% and 90% level



Figure 3: Robustness to Model Specification

Notes: This figure shows robustness of the main results to different specifications of the model. It plots the coefficient for the variable *has female officer* for different regressions. The top-left panel includes sector X week, shift FE, number of officer FE and sector X number of officers FE; the top-right panel includes sector X week, shift FE, number of officer FE and beat FE; and the bottom panel includes sector X year X month FE, shift FE, number of officer FE and week FE. *Full sample* corresponds to the entire universe of calls for service that were classified as domestic violence by the call taker. *Disturbances or threats* corresponds to the subset that the call taker classified as disturbances or threats related to domestic violence. *Assaults or protective orders* related to domestic violence. Standard errors are clustered at the level of the team of responding officers initially dispatched to the scene. The confidence intervals correspond to the 95% level

	All	Has Female Officer	Only Male Officers
Call Characteristics			
Has Female Officer	0.194	1.000	0.000
	(0.396)	(0.000)	(0.000)
Number of Officers Dispatched	1.737	1.906	1.696
	(0.599)	(0.573)	(0.598)
Call Priority	1.507	1.498	1.510
	(0.562)	(0.554)	(0.564)
Time Between Call and Dispatch	1483.713	1398.211	1504.326
	(4009.669)	(3803.548)	(4057.550)
Average Experience	8.440	7.654	8.629
	(6.960)	(6.041)	(7.151)
Has Minority Officer	0.418	0.428	0.416
	(0.493)	(0.495)	(0.493)
Pct White	0.601	0.602	0.601
	(0.224)	(0.216)	(0.226)
Pct Women	0.492	0.486	0.493
	(0.072)	(0.073)	(0.071)
Pct Unemployed	0.066	0.065	0.067
	(0.062)	(0.064)	(0.062)
Quitcomos			
<u>Final Classification was DV</u>	0.601	0.611	0 598
	(0.490)	(0.487)	(0.490)
Reported as a Criminal Incident	(0.430) 0.326	(0.401) 0.331	(0.430) 0.325
reported as a criminal meldent	(0.320)	(0.470)	(0.469)
Arrest on Scene	0.405)	0.135	0.197
	(0.325)	(0.342)	(0.121)
Observations	98644	19162	79482
	30044	13102	13404

Table 1: Summary Statistics

Notes: This table reports mean, standard deviation (in parentheses) and number of observations for each variable. *All* corresponds to the full sample of calls that the call taker classified as domestic violence, *has female officer* corresponds to the subset of those in which at least one of the initially dispatched officers was female, and *only male officers* refers to the subset in which all the initially dispatched officers were male. Average experience in years is the mean of the years that the responding officers dispatched to the call have been on the force. Pct white, women, and unemployed corresponds to the percent of the population in the census block group that was white, female, and unemployed as measured in the 2016 ACS.

	(1)
	Has Female Officer
Initially Classified as DV	0.0005
	(0.0020)
Sector-year-month-week FE	Yes
Shift FE	Yes
Number of Officer FE	Yes
Observations	1498303
R^2	0.078
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.05$	01

Table 2: Testing Conditional Random Assignment – Selection of Women into Domestic Violence Related Calls

Notes: This table reports the results of an OLS regression of a dummy variable that takes value 1 if there was a female officer in the patrol car on an indicator for whether the incident they were dispatched to was classified as domestic violence by the call taker. The regression was run using the universe of all calls for service. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers in the patrol car.

	(1)	(2)	(3)	(4)	(5)
	Call Priority	Time Between Call and Dispatch	Pct White	Pct Women	Pct Unemployed
Has Female Officer	-0.0029	-56.0987	0.0011	-0.0008	-0.0006
	(0.0054)	(40.9712)	(0.0013)	(0.0006)	(0.0005)
Sector-year-month-week FE	Yes	Yes	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes	Yes	Yes
Observations	97749	97749	97749	97749	97749
R^2	0.148	0.184	0.659	0.352	0.302

Table 3: Testing Conditional Random Assignment – Characteristics of Domestic Violence Calls

Notes: This table reports the results of an OLS regression of a dummy variable that takes value 1 if there was at least one female officer dispatched for a domestic violence call on call characteristics. Call priority refers to the priority assigned by the call taker. Time Between Call and Dispatch refers to the seconds between when the call was received and when the first officers were dispatched. Pct white, pct women, and pct unemployed corresponds to the percent of the population in the census block group where the call originated that is white non-Hispanic, women, and that are unemployed, respectively. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)	(3)
	Final Classification was DV	Reported as a Criminal Incident	Arrest on Scene
Has Female Officer	0.0165^{***}	0.0086**	0.0033
	(0.0056)	(0.0042)	(0.0032)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	97749	97749	97749
R^2	0.137	0.172	0.144
Mean All Male Officers	0.5985	0.3245	0.1267

Table 4: Effect of Dispatching at Least One Female Officer to Calls for Domestic Violence

Notes: This table shows estimates of the effect of dispatching at least one female officer to domestic violence calls on the final classification of the incident, whether the incident was reported as a crime and whether an arrest was made at the scene. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)
	Disturbances or Threats	Assaults or Protective Orders
Panel A: Final Classification was DV		
Has Female Officer	0.0219***	0.0150^{*}
	(0.0069)	(0.0084)
Sector-year-month-week FE	Yes	Yes
Shift FE	Yes	Yes
Number of Officers FE	Yes	Yes
Observations	63727	30464
R^2	0.182	0.282
All-Male Team Mean	0.5439	0.7080
Panel B: Reported as a Criminal Incident		
Has Female Officer	0.0097^{**}	0.0130
	(0.0045)	(0.0086)
Sector-year-month-week FE	Yes	Yes
Shift FE	Yes	Yes
Number of Officers FE	Yes	Yes
Observations	63727	30464
R^2	0.210	0.302
All-Male Team Mean	0.1994	0.5673
Panel C: Arrest on Scene		
Has Female Officer	0.0061^{**}	0.0032
	(0.0031)	(0.0077)
Sector-year-month-week FE	Yes	Yes
Shift FE	Yes	Yes
Number of Officer FE	Yes	Yes
Observations	63727	30464
R^2	0.188	0.285
All-Male Team Mean	0.0775	0.2212

Table 5: Heterogeneity by Type of Domestic Violence

Notes: This table shows heterogeneous estimates by type of domestic violence call of the effect of dispatching at least one female officer to domestic violence calls on the final classification of the incident, whether the incident was reported as a crime and whether an arrest was made at the scene. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Another Incident	Another Incident	Another Incident
	Within 14 Days	Within 30 Days	Within 60 Days
Has Female Officer	-0.006*	-0.008**	-0.007
	(0.004)	(0.004)	(0.004)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	97749	97749	97749
R^2	0.149	0.157	0.160
Mean	0.210	0.299	0.406

Table 6: Effect of Dispatching at Least One Female Officer on Future Victimization

* p < 0.10, ** p < 0.05, *** p < 0.01

Notes: This table shows estimates of the effect of dispatching at least one female officer to domestic violencerelated calls on the probability of a future call for domestic violence within 14, 30 and 60 days. Another incident withing t days is an indicator that takes value one if, within t days of the incident, there is another call for service for domestic violence at the same blurred address. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Within 15 Days	Between days 16-30	Between days 31-60
Has Female Officer	-0.006*	-0.004	-0.001
	(0.004)	(0.003)	(0.004)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	97749	97749	97749
R^2	0.149	0.164	0.165
Mean	0.210	0.165	0.246

Table 7: Effect of Dispatching at Least One Female Officer on Future Victimization

* p < 0.10, ** p < 0.05, *** p < 0.01

Notes: This table shows estimates of the effect of dispatching at least one female officer to domestic violencerelated calls on the probability of a future call for domestic violence. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Final Classification was DV	Reported as a Criminal Incident	Arrest on Scene
Has Female Officer	0.0031***	0.0126***	0.0012
	(0.0009)	(0.0024)	(0.0012)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	333469	333469	333469
R^2	0.053	0.098	0.065
Mean All Male Officers	0.0295	0.1958	0.0510

Table 8: Effect of Dispatching at Least One Female Officer to Interpersonal Violence Non-Domestic Violence Calls

Notes: This table shows estimates of the effect of dispatching at least one female officer to calls that were, at the time the call was placed, classified as assaults, fights, disturbances, or threats not related to domestic violence calls on the final classification of the incident, whether the incident was reported as a crime and whether an arrest was made at the scene. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Final Classification was DV	Reported as a Criminal Incident	Arrest on Scene
Has Female Officer	0.0006**	0.0115**	-0.0003
	(0.0003)	(0.0047)	(0.0006)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	1069315	1069315	1069315
R^2	0.016	0.075	0.027
All-Male Team Mean	0.0081	0.1813	0.0233

Table 9: Effect of Dispatching at Least One Female Officer to Non-Violent Non-DV Calls

Notes: This table shows estimates of the effect of dispatching at least one female officer to calls that were, at the time the call was placed, not classified as domestic violence, nor as interpersonal violence (i.e., assault, fights, disturbances or threats) on the final classification of the incident, whether the incident was reported as a crime and whether an arrest was made at the scene. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Full Sample	Disturbances/Threats	Assaults/Protective Orders
Has Female Officer	0.0396^{***}	0.0447^{**}	0.0494**
	(0.0150)	(0.0186)	(0.0195)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	96038	62540	29895
R^2	0.166	0.211	0.291
All-Male Team Mean	136.2113	124.5766	158.9459

Table 10: Log Minutes at the Scene

Notes: This table shows the effects of dispatching at least one female officer on the time officers stay at the scene, where time at the scene is defined as the number of minutes that pass between when the first officers arrive at the scene and when they clear the call. Disturbances or threats correspond to the subset of cases that the call taker classified as a disturbance related to domestic violence or threats related to domestic violence. Assaults or protective orders correspond to the subset that the call taker classified as an assault related to domestic violence or as breaking of a protective order for domestic violence. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	Dependent variable: Multiple Offenses Listed=1			
	(1)	(2)	(3)	
	Full Sample	Disturbances or Threats	Assaults or Protective Orders	
Has Female Officer	0.0222***	0.0526***	0.0133	
	(0.0074)	(0.0143)	(0.0109)	
Sector-year-month-week FE	Yes	Yes	Yes	
Shift FE	Yes	Yes	Yes	
Number of Officer FE	Yes	Yes	Yes	
Observations	29573	9491	15344	
R^2	0.272	0.371	0.350	
Mean	0.2199	0.2302	0.2145	

Table 11: Multiple Offenses

Standard errors in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

Notes: This table shows the effects of dispatching at least one female officer on the number of offenses listed by the responding officers, conditional on having reported the incident as a crime. The full sample includes the subset of calls for service that the call taker classified as domestic violence and that the responding officers reported as a criminal incident. Disturbances or threats correspond to the subset that the call taker classified as a disturbance related to domestic violence or threats related to domestic violence. Assaults or protective orders correspond to the subset that the call taker classified as an assault related to domestic violence or as breaking of a protective order for domestic violence. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Full Sample	Disturbances or Threats	Assaults or Protective Orders
Panel A: Female Victim=1			
Has Female Officer	0.0297^{***}	0.0896***	0.0103
	(0.0094)	(0.0193)	(0.0139)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officers FE	Yes	Yes	Yes
Observations	20635	5960	10374
R^2	0.317	0.401	0.382
All-Male Team Mean	0.2377	0.2483	0.2319
Panel B: Female Victim=0			
Has Female Officer	-0.0135	-0.0351	0.0290
	(0.0184)	(0.0359)	(0.0323)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	4672	1190	1783
R^2	0.428	0.432	0.459
All-Male Team Mean	0.1717	0.1790	0.1565

Table 12: Multiple Offenses Listed by Gender of Victim(s)

Standard errors in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

Notes: This table shows the effects of dispatching at least one female officer on the number of offenses listed by the responding officers, conditional on having reported the incident as a crime, by victim gender. The full sample includes the subset of calls for service that the call taker classified as domestic violence and that the responding officers reported as a criminal incident. Disturbances or threats correspond to the subset that the call taker classified as a disturbance related to domestic violence or threats related to domestic violence. Assaults or protective orders corresponds to the subset that the call taker classified as an assault related to domestic violence or as breaking of a protective order for domestic violence. *Female Victim* is an indicator variable that takes value 1 when at least one of the victims was female. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

Appendix





Notes: This figure shows the distribution of the percent of police officers that are female in 2013 in US cities with at least 250,000 people. The share was calculated using the 2013 wave of the LEMAS survey. The red line denotes where the Seattle Police Department lies within this distribution.



Figure A.II: Percent of Cases Classified as Crimes by DV Label

Notes: This figure shows the percent of cases classified as domestic violence by the call taker in which officers determined that a crime took place, separately for the cases in which officers labeled the offense as domestic violence and not (i.e., separately for the cases in which the officers determined that the domestic violence classification by the call taker was incorrect and the cases in which they believed that it was correct).

Figure A.III: Percent of Domestic Violence Cases with At Least One Female Officer by Beat



Notes: This figure shows the percent of cases classified as domestic violence by the call taker in each beat to which, throughout the time period studied (2012–2023), at least one female officer was initially dispatched. The red borders denote the limits of each sector.

Figure A.IV: Probability of Another DV Incident by Gender Composition of Responding Officers



Notes: This figure shows the raw average probability of a subsequent incident of domestic violence taking place within each of the 30 days following a domestic violence call, by the gender composition of the responding officers of the original incident. The probability was calculated by creating indicator variables for each incident that takes value 1 if there was another incident of domestic violence (as classified by the call taker) at the same blurred address within x days following the original incident, where $x \in [0, 30]$. Then the average for each day was calculated separately for incidents where at least one female officer responded and incidents in which every responding officer was male.



Figure A.V: Robustness of Effort Measures to Officer Experience

(b) Multiple Charges

Notes: This figure shows the robustness of the effort measures to the inclusion of controls for the experience of the officers. It plots the coefficient for the variable has female officer for different regressions: one controlling for the average experience of the first responding officers and one for an indicator that takes value 1 if at least one of the responding officers had been working as a patrol officer for less than an year at the time of the incident. Full sample corresponds to the universe of calls for service that were classified as domestic violence by the call taker. Disturbances or threats corresponds to the subset that the call taker classified as disturbances or threats. assaults or protective orders corresponds to the subset of calls that the call taker classified as assaults or breaking of protective orders. Standard errors are clustered at the level of the team of responding officers initially dispatched to the scene. The confidence intervals correspond to the 95% and 90% levels



Figure A.VI: Percent of Domestic Violence Cases with At Least One Female Officer by Beat

Notes: This figure shows the results of having a female officer separately for the cases in which there was a female officer and a female officer was the most experienced and the cases in which there was a female officer (s) but there were also male officer(s) and the male officer(s) were more experienced than the female officer(s). Estimates are derived from Equation 1. Standard errors are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)	(4)	(5)
	Another Incident				
	Within 15 Days	Within 30 Days	Within 60 Days	Within 180 Days	Within 365 Days
Has Female Officer	-0.006*	-0.008**	-0.007	0.003	0.001
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Sector-year-month-week FE	Yes	Yes	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes	Yes	Yes
Observations	97749	97749	97749	97749	97749
R^2	0.149	0.157	0.160	0.165	0.171
All-Male Team Mean	0.212	0.301	0.407	0.584	0.685

Table A.I: Effect of Dispatching at Least One Female Officer on Future Victimization

Notes: This table shows estimates of the effect of dispatching at least one female officer to domestic violencerelated calls on the probability of a future call for domestic violence within 15, 30, 60, 180 and 365 days. *another incident within* t days is an indicator that takes value one if, within t days of the incident, there is another call for service for domestic violence at the same blurred address. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)	(4)	(5)
	Within 15 Days	Between days 16-30	Between days 31-60	Between days 61-180	Between days 181-365
Has Female Officer	-0.006*	-0.004	-0.001	0.005	-0.002
	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)
Sector-year-month-week FE	Yes	Yes	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes	Yes	Yes
Observations	97749	97749	97749	97749	97749
R^2	0.149	0.164	0.165	0.182	0.217
All-Male Team Mean	0.212	0.166	0.246	0.398	0.487

Table A.II: Effect of Dispatching at Least One Female Officer on Future Victimization

Notes: This table shows estimates of the effect of dispatching at least one female officer to domestic violencerelated calls on the probability of a future call for domestic violence. *Full sample* corresponds to the entire universe of calls for service that were classified as domestic violence by the call taker. *Disturbances or threats* corresponds to the subset that the call taker classified as disturbances or threats related to domestic violence. *assaults or protective orders* corresponds to the subset of calls that the call taker classifies as assaults or breaking of protective orders related to domestic violence. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)	(4)	(5)
	Call Priority	Time Between Call and Dispatch	Pct White	Pct Women	Pct Unemployed
Has Female Officer	0.0133	32.2031	-0.0008	-0.0005	0.0005
	(0.0250)	(44.6625)	(0.0009)	(0.0005)	(0.0005)
Sector-year-month-week FE	Yes	Yes	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes	Yes	Yes
Observations	1307405	1307405	1307405	1307405	1307405
R^2	0.073	0.085	0.546	0.350	0.244

Table A.III: Testing Conditional Random Assignment – All Non-DV Calls

Notes: This table reports the results of an OLS regression of a dummy variable that takes value 1 if there was at least one female officer dispatched on call characteristics for all calls that the call taker did not classify as domestic violence. Call priority refers to the priority assigned by the call taker. Time Between Call and Dispatch refers to the time in seconds between when the call was received and when the first officers were dispatched. Pct white, pct women and pct unemployed correspond to the percent of the population in the census block group where the call originated that is white non-Hispanic, women and that are unemployed, respectively. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

60

	(1)	(2)	(3)	(4)	(5)
	Call Priority	Time Between Call and Dispatch	Pct White	Pct Women	Pct Unemployed
Has Female Officer	-0.0079	0.1935	-0.0013	-0.0004	0.0012**
	(0.0077)	(26.7764)	(0.0008)	(0.0005)	(0.0006)
Sector-year-month-week FE	Yes	Yes	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes	Yes	Yes
Observations	333469	333469	333469	333469	333469
R^2	0.078	0.114	0.558	0.395	0.271

Table A.IV: Testing Conditional Random Assignment – Interpersonal Violence Non-DV

Notes: This table reports the results of an OLS regression of a dummy variable that takes value 1 if there was at least one female officer dispatched on call characteristics for calls that were classified by the call taker as assaults, fights, disturbances or threats, all not related to domestic violence. Call priority refers to the priority assigned by the call taker. Time Between Call and Dispatch refers to the time in seconds between when the call was received and when the first officers were dispatched. Pct white, pct women and pct unemployed correspond to the percent of the population in the census block group where the call originated that is white non-Hispanic, women and that are unemployed, respectively. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)	(3)
	Final Classification was DV	Reported as a Criminal Incident	Arrest on Scene
Has Female Officer	0.0024^{***}	0.0121***	0.0009
	(0.0008)	(0.0024)	(0.0012)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	199945	199945	199945
R^2	0.081	0.121	0.093
Mean	0.0178	0.1269	0.0312

Table A.V: Effect of Dispatching at Least One Female Officer to Non-DV Disturbance Incidents

Notes: This table shows estimates of the effect of dispatching at least one female officer to calls that were, at the time the call was placed, classified as disturbances or threats not related to domestic violence on the final classification of the incident, whether the incident was reported as a crime and whether an arrest was made at the scene. Estimates are derived from Equation 1. The variable *Keep call taker classification* is an indicator variable equal to 1 if the call taker and responding officers both classified the incident as a non-domestic-violence-related assault, disturbance/threat, or fight. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	Final Classification DV				
	(1)	(2)	(3)		
	Full Sample	Disturbances or Threats	Assaults or Protective Orders		
Has Female Officer	0.0170***	0.0217***	0.0158*		
	(0.0055)	(0.0069)	(0.0083)		
Has Minority Officer	-0.0061	-0.0060	-0.0074		
	(0.0053)	(0.0064)	(0.0069)		
Average Experience	-0.0009**	-0.0015***	0.0005		
	(0.0004)	(0.0005)	(0.0005)		
Observations	98227	63512	31177		
R^2	0.137	0.183	0.278		
All-Male Team Mean	0.5997	0.5442	0.7114		
		Report as C	rime		
	(1)	(2)	(3)		
	Full Sample	Disturbances or Threats	Assaults or Protective Orders		
Has Female Officer	0.0076^{*}	0.0094**	0.0093		
	(0.0042)	(0.0045)	(0.0085)		
Has Minority Officer	-0.0010	-0.0032	0.0063		
	(0.0035)	(0.0037)	(0.0070)		
Average Experience	-0.0014***	-0.0011***	-0.0010*		
	(0.0003)	(0.0003)	(0.0005)		
Observations	98227	63512	31177		
R^2	0.172	0.211	0.301		
All-Male Team Mean	0.3223	0.1991	0.5559		
		Arrest on the	Scene		
	(1)	(2)	(3)		
	Full Sample	Disturbances or Threats	Assaults or Protective Orders		
Has Female Officer	0.0026	0.0057^{*}	0.0017		
	(0.0032)	(0.0031)	(0.0076)		
Has Minority Officer	-0.0023	-0.0032	0.0057		
	(0.0027)	(0.0026)	(0.0061)		
Average Experience	-0.0020***	-0.0013*** -0.0030***			
	(0.0002)	(0.0002)	(0.0004)		
Observations	98227	63512	31177		
R^2	0.146	0.189	0.286		
All-Male Team Mean	0.1256	0.0772	0.2165		

Table A.VI: Robustness to Officer Controls

Notes: This table shows the results from testing the robustness of the results to officer controls. *Has minority officer* is a dummy variable that takes value one when at least one of the responding officers is not non-Hispanic white, and *average experience* is the average experience in years of the team of responding officers first dispatched to the scene. *Full sample* corresponds to the entire universe of calls for service that were classified as domestic violence by the call taker. *Disturbances or threats* corresponds to the subset that the call taker classified as disturbances or threats related to domestic violence. *Assaults or protective orders* corresponds to the subset of calls that the call taker classifies as assaults or breaking of protective orders related to domestic violence. Estimates are derived from Equation 1 (with the added officer controls). Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Final Classification was DV	Reported as a Criminal Incident	Arrest on Scene
Has Minority Officer	-0.0071	-0.0017	-0.0029
	(0.0053)	(0.0035)	(0.0027)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	98527	98527	98527
R^2	0.136	0.172	0.144
Mean	0.5995	0.3224	0.1272

Table A.VII: Robustness to Officer Controls

Notes: This table shows the effect of dispatching at least one non-Hispanic white officer to incidents classified as domestic violence by the call taker on the probability that officers keep the classification as domestic violence, report the incident as a crime, and arrest the perpetrator. *Has minority officer* is dummy variable that takes value one when at least one of the responding officers is not non-Hispanic white. Estimates are derived from Equation 1 (with the added officer controls). Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)	(3)
	Full Sample	Disturbances/Threats	Assaults/Protective Orders
Has Female Officer	4.3945^{***}	5.0950^{***}	3.8918^{*}
	(1.4609)	(1.6971)	(2.2522)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officers FE	Yes	Yes	Yes
Observations	96038	62540	29895
R^2	0.166	0.211	0.291
All-Male Team Mean	136.2113	124.5766	158.9459

Table A.VIII: Minutes at the Scene

Notes: This table shows the effects of dispatching at least one female officer on the time officers stay at the scene, where time at the scene is defined as the number of minutes that pass between when the first officers arrive at the scene and when they clear the call. Disturbances or threats correspond to the subset that the call taker classified as a disturbance related to domestic violence or threats related to domestic violence. Assaults or protective orders correspond to the subset that the call taker classified as an assault related to domestic violence or as breaking of a protective order of domestic violence. Estimates are derived from Equation 1. The dependent variable is in levels, meaning it represents changes in minutes. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)
	Log Minutes at the Scene	Log Minutes at the Scene
Has Female Officer	0.0470***	0.0277^{*}
	(0.0180)	(0.0159)
Sector-year-month-week FE	Yes	Yes
Shift FE	Yes	Yes
Number of Officer FE	Yes	Yes
$Minutes \geq 1$	No	Yes
Observations	318949	312039
R^2	0.092	0.101
All-Male Team Mean	85.6745	87.6969

Table A.IX: Log Time at the Scene for Violent Non-DV Incidents

Notes: This table shows the effects of dispatching at least one female officer on the time officers stay at the scene for the subset of calls classified as assault, fights, disturbances, or threats not related to domestic violence by the call taker. Time at the scene is defined as the number of minutes that pass between when the first officers arrive at the scene and when they clear the call. Estimates are derived from Equation 1. Column 1 shows the results for the entire sample, while Column 2 restricts the analysis to cases in which officers stayed at the scene for at least one minute. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)
	Log Minutes at the Scene	Log Minutes at the Scene
Has Female Officer	0.0320*	0.0041
	(0.0188)	(0.0166)
Sector-year-month-week FE	Yes	Yes
Shift FE	Yes	Yes
Number of Officer FE	Yes	Yes
$Minutes \geq 1$	No	Yes
Observations	1015715	991723
R^2	0.043	0.050
All-Male Team Mean	84.2189	86.3710

Table A.X: Log Time at the Scene for Non-Violent Non-DV Incidents

Notes: This table shows the effects of dispatching at least one female officer on the time officers stay at the scene for the subset of calls that the call taker did not classify as domestic violence nor violence between two or more people (i.e., as assault, fights, disturbances, threats). Time at the scene is defined as the number of minutes that pass between when the first officers arrive at the scene and when they clear the call. Estimates are derived from Equation 1. Column 1 shows the results for the entire sample, while Column 2 restricts the analysis to cases in which officers stayed at the scene for at least one minute. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.

	(1)	(2)	(3)
	Full Sample	Disturbances/Threats	Assaults/Protective Orders
Has Female Officer	0.0341**	0.0380**	0.0424**
	(0.0147)	(0.0182)	(0.0190)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
$Minutes \ge 1$	Yes	Yes	Yes
Observations	95777	62335	29828
R^2	0.170	0.216	0.295
Mean	136.6055	124.9676	159.2258

Table A.XI: Log Time at the Scene for Domestic Violence Incidents

Notes: This table shows the effects of dispatching at least one female officer on the time officers stay at the scene in incidents classified as domestic violence by the call taker, restricting to cases in which officers stay for at least one minute. Time at the scene is defined as the number of minutes that pass between when the first officers arrive at the scene and when they clear the call. Disturbances or threats correspond to the subset that the call taker classified as a disturbance related to domestic violence or threats related to domestic violence. Assaults or protective orders correspond to the subset that the call taker classified as a massault related to domestic violence or as breaking of a protective order for domestic violence. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene. * p < 0.10, ** p < 0.05, *** p < 0.01

	(1)	(2)	(3)
	All Non-DV	Violent Non-DV	Non-Violent Non-DV
Has Female Officer	0.0055^{**}	0.0067	0.0053**
	(0.0024)	(0.0046)	(0.0027)
Sector-year-month-week FE	Yes	Yes	Yes
Shift FE	Yes	Yes	Yes
Number of Officer FE	Yes	Yes	Yes
Observations	259769	64335	194212
R^2	0.074	0.175	0.095
Mean	0.1235	0.1868	0.1029

Table A.XII: Multiple Charges – All non-DV incidents

Notes: This table shows the effects of dispatching at least one female officer on the number of offenses listed in criminal reports by the responding officers, conditional on having reported the incident as a crime. All non-DV refers to all incidents that the call taker did not classify as domestic violence and that the responding officers reported as a criminal incident. Violent non-dv corresponds to the subset of calls that the call taker classified as assault, fights, threats or disturbances, while non-violent non-dv refers to the remaining cases that the call taker did not say were DV related. Estimates are derived from Equation 1. Standard errors are reported in parentheses and are clustered at the level of the team of responding officers initially dispatched to the scene.