

Domestic disturbances and fatal police shootings: An analysis of The Washington Post's data*

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Abstract

Domestic disturbances are often touted as one of the most dangerous incidents to which police officers respond. Nevertheless, research examining the relative dangerousness of these incidents to responding officers is mixed. Recently, media outlets have compiled rich data on fatal police shootings, which provides the opportunity to examine police responses to domestic disturbances in a different light. Using data compiled by *The Washington Post*, this study explored whether domestic disturbances that resulted in a fatal shooting were more or less likely than other fatal shooting incidents to have involved: (a) a civilian armed with a firearm or toy/replica firearm, and/or (b) a civilian who was determined to pose an imminent threat to officer or public safety. Findings suggest that there were some, albeit not many, differences in these outcomes between domestic disturbances and seven other incident types. Avenues for future research in this area are provided, along with a discussion about the availability of current data on this topic.

Introduction

Law enforcement officers are no strangers to responding to domestic violence; according to Sherman (1992), “domestic assault is the single most frequent form of violence that police encounter, more common than all other forms of violence combined” (p. 1). It is not surprising, then, that police officer responses to domestic violence have received substantial empirical attention over the past few decades. One area of research examined by scholars involved the danger posed by domestic disturbances to responding officers. Although early researchers argued that domestic disturbances were the most dangerous incidents for responding officers, later researchers began to debate this point (e.g., see Ellis 1987; Ellis et al., 1993; Garner & Clemmer, 1987; Hirschel et al., 1994; Kaminski & Sorensen, 1995). The perception of danger posed by domestic disturbances could plausibly influence the way police officers approach these volatile situations. In 1987, Ellis noted that as a result of long-standing beliefs about the dangerousness of domestic disturbance cases, officers “socially constructed these events in such a way as to justify shooting first and asking questions later” (p. 326). Still, there appears to be somewhat of a disconnect between officer perceptions about responding to these cases and empirical findings (e.g., Hirschel et al., 1994; Garner & Clemmer, 1986; MacDonald et al., 2003; Stanford & Mowry, 1990).

Although the debate surrounding whether domestic disturbances are the most dangerous type of incident to responding officers goes back several decades, it has yet to be fully resolved. Since 2015, *The Washington Post* has compiled data on fatal shootings of civilians by law enforcement officers across the United States. One can assume that if an officer fires his/her weapon, he/she perceived some degree of threat or danger – regardless of whether the shooting

was legally justified or not. According to Fyfe (1986), because officers are required to respond quickly to incidents, they are forced to determine the best course of action on the fly – a process he referred to as “the split-second syndrome.” Therefore, examining those incidents where a police officer perceived a danger or threat to him/herself or others allows for a unique opportunity to assess whether such incidents vary in terms of the level of threatening behaviors exhibited by the civilian just prior to the shooting. Examining incidents from this perspective provides a different approach to understanding police responses to – and perhaps perceptions of – domestic disturbances.

Domestic Violence: Real and Perceived Danger to Police Officers

This study’s focus on incident type is driven largely by the heightened focus on officer use of force, officer perceptions of domestic violence, and the changing nature of law enforcement’s response to domestic violence over time. Throughout much of American history, the criminal justice system was considered ill apt to respond to domestic violence because it was viewed as a “private issue” (see Erez, 2002; Fagan, 1986). Moreover, it was perceived as especially dangerous to law enforcement officers to invoke formal arrest powers (see Ellis, 1987 for a discussion of this issue). However, beginning in the 1980s, after a number of lawsuits against police departments by women for the failure to protect them from their abusers, and findings from highly influential social science experiments – namely the Minneapolis Domestic Violence Experiment (Sherman & Berk, 1984) – the police response to domestic violence shifted dramatically, as illustrated by an increased use of mandatory and pro-arrest/preferred arrest policies.

Over the past few decades, domestic violence has continued to be a major issue that impacts American households, which in turn, significantly impacts the case flow of incidents

coming to the attention of the criminal justice system. In fact, domestic violence accounts for a significant proportion of offenses to which officers respond. Based on data from the National Crime Victimization Survey, Truman and Morgan (2015) reported that victimization at the hands of one's intimate partner, immediate family member, and/or relatives comprised 21 percent of all violent crime; approximately 15 percent is accounted for by intimate partner violence. Recent estimates provided by the National Intimate Partner and Sexual Violence Survey suggest that roughly 70 million men and women in the United States have experienced physical violence at the hands of their intimate partners over their lifetime; these numbers do not include other forms of violence (e.g., rape) perpetrated by an intimate partner (Breiding et al., 2014). Despite the magnitude of domestic violence in the United States, it is highly underreported (e.g., Tjaden & Thoennes, 2000).

Still, domestic violence-related calls are one of the most common offenses to which officers respond (Sherman et al., 1992). Disagreements remain about the best way for officers to respond to domestic violence cases and about the risk that police officers face in their response. Although early researchers suggested that domestic disturbances are the most dangerous types of calls for responding officers (e.g., Bard, 1970), scholars in the 1980s and 1990s casted doubt on that argument (e.g., Ellis, 1987; Hirschel et al., 1994; Garner & Clemmer, 1986; Stanford & Mowry, 1990). Specifically, they criticized the methodologies earlier studies relied upon to come to the conclusions about the dangerousness of domestic disturbances, and argued that prior research might have overstated the problem (e.g., Ellis, 1987; Garner & Clemmer, 1986). For example, critics argued that early research considered the terms *disturbance* and *domestic disturbance* to be synonymous, even though the former category may also include non-domestic-related incidents (see Ellis 1987; Garner & Clemmer, 1987 for a discussion). In addition, prior

studies were criticized for not considering the proportion of cases involving force against an officer relative to the total number of cases to which officers respond (see a discussion in Ellis, 1987; Hirschel et al., 1994).

Conclusions about the level of danger posed to police by domestic disturbances may also depend on the outcome being examined (e.g., assault, injury, fatality of police officer). For example, Ellis et al. (1993) reported that among a sample of officers in three Canadian police forces, only 2.5% of injuries they sustained on the job resulted from domestic disturbances. The authors also found that domestic disturbances did not rank highest on the dangerousness ranking (i.e., risk of experiencing an injury) based on the frequency of calls and time-at-risk; however, these incidents did rank third most dangerous, following arrests/transporting/controlling civilians and robberies. In a similar vein, Uchida et al. (1987) reported that domestic disturbances present a significant danger to officers based on assaults of officers (with and without injuries) when compared to other calls for service (but see MacDonald et al., 2003). According to Friday et al. (1991), almost 80 percent of officers in a Midwestern community reported being physically assaulted when trying to make an arrest in domestic cases in the late 1980s. Finally, Johnson (2008) examined 143 incidents involving 225 officers who were assaulted with firearms when responding to domestic disturbances between 1999 and 2003, and found that over half of the officers were not injured (57 percent), roughly 29 percent were non-fatally injured, and almost 14 percent were killed. Thus, the level of danger to officers (as measured by assaults and injuries to officers) has been widely studied, although the magnitude of that danger is still debated.

As it pertains to officer fatalities, Kercher et al. (2013) reported that of all homicides of law enforcement officers between 1996 and 2010, 15% resulted from domestic disturbance calls – with almost half of those calls specifically identified as *intimate partner violence* (as opposed

to some other form of domestic disturbance; see also Meyer & Carroll, 2011).¹ Most recently, Breul and Keith (2016) found that of the 91 deaths of officers responding to calls for service in the line of duty between 2010 and 2014, 22% were due to domestic dispute calls, which comprised the largest category of officer fatalities. Moreover, according to Breul and Keith (2016), domestic disputes were the underlying reason for other calls for service resulting in officer fatalities, such that the incidents were domestic in nature, but the call was officially dispatched as something else. However, these studies do not statistically account for the reality that domestic violence is one of the most common calls officers respond to (Sherman, 1992) (i.e., they are exposed to these incidents more frequently and thus the opportunity to be fatally assaulted is higher).

Finally, MacDonald and colleagues (2003) examined the relative resistance between officers and civilians in incidents in which Miami-Dade police officers completed a use-of-force report between 1996 and 1998; they found that 11 percent of use-of-force reports were generated from domestic disturbance calls for service. These incidents came fifth behind calls for service for *other violent crimes, administrative functions, property crimes, and other crimes*. Although MacDonald et al. (2003) reported that suspect resistance in domestic disturbance incidents was the third highest out of six incident types, officer force was *lowest* in these incidents. In sum, then, domestic disturbance incidents as a whole comprised a smaller percentage of officer use of force incidents in Miami-Dade, but suspect resistance in the incidents that generated a use of force report was high.

Despite mixed findings, many officers still appear to subscribe to the notion that domestic disturbance cases are particularly dangerous. In the recent *Deadly Calls and Fatal Encounters*

¹ Note, however, that scholars have identified limitations of official data that track line-of-duty deaths of police officers (Kuhns, Dolliver, Bent, & Maguire, 2016; Maguire, Nix, & Campbell, 2017).

publication developed through a cooperative agreement between the US Department of Justice COPS Office and the National Law Enforcement Officers Memorial Fund, it was noted that:

As most law enforcement officers have been informed during their training or know intuitively from working the streets, and as this data supports, *Domestic Dispute* calls, or intra-family offenses, were the most dangerous type of call for the responding officers (Breul & Keith, 2016, p. 15).

It is clear that questions surrounding the danger posed to officers who respond to domestic disturbance cases remain. Many of the aforementioned studies have examined the danger to law enforcement officers by considering assaults, injuries, and fatalities, and have concluded that a non-trivial portion of police officers are indeed assaulted, injured, and killed when responding to domestic disturbances. To our knowledge, no empirical study has specifically *asked* officers *why* they view domestic disturbance cases as the most dangerous types of offenses to which they may respond. Scholars have speculated the reasons; for example, Stanford & Mowry (1990) argue that it could be an increased risk of injury “that is felt to fuel the perception of danger in responding to domestic disturbance calls” (p. 248) and speculate that repeated responses to the same residence lend support to officers’ perceptions of the danger in these cases.

Nevertheless, based on research highlighting the number of officers assaulted, injured, or killed when responding to domestic disturbances, it is understandable why officers might perceive these cases to be most dangerous. Whether objectively more dangerous or not, greater perceived danger on the part of responding officers could mean they approach these cases with greater apprehension than other cases. In fact, MacDonald et al. (2003) suggested that when officers are dispatched to domestic disturbance calls, “it undoubtedly conjures a picture in the officer’s mind and creates a variety of danger-laden expectations as to what the situation will involve” (p. 121). MacDonald and colleagues (2003) also note that because officers are more

likely to believe that domestic-related incidents carry great potential for approaching a combative suspect, officers may be better prepared to respond. By examining the context surrounding those domestic incidents in which an officer elected to use deadly force, we can learn more about how domestic disturbance incidents compare to other incidents.

Police Use of Force

Before discussing our methodology and analyses, it is worthwhile to also briefly review the police use of force literature. The extant literature on the correlates of officers' decision to use force can be grouped into four major perspectives: encounter/situational, suspect, officer, and community/ecological (for a thorough review see, for example, Bolger, 2015; Klahm & Tillyer, 2010). Of particular concern here are the encounter/situational and suspect perspectives.

Regarding encounter/situational correlates, studies have consistently shown that officers are more likely to use force when there is evidence that a crime has been committed (McCluskey & Terrill, 2005; McCluskey, Terrill, & Paoline, 2005; Sun & Payne, 2004), when the civilian is in possession of a weapon (Johnson, 2011a; McCluskey et al., 2005; Sun & Payne, 2004), when the civilian is uncooperative or resistant (Garner, Maxwell, & Heraux, 2002; McCluskey & Terrill, 2005; Rydberg & Terrill, 2010), and when there is conflict between civilians (McCluskey et al., 2005; Paoline & Terrill, 2007). The effect of offense seriousness on police use of force, on the other hand, has received mixed empirical support (Friedrich, 1980; Lawton, 2007).

Prior studies have also considered the effects of civilian characteristics on the decision to use force. The effect of civilian race on police use of force is decidedly mixed. Some studies report no effect of race on police use of force (Lawton, 2007; McCluskey et al., 2005), others indicate that minority civilians face an increased likelihood of being subjected to some levels of force (Engel & Calnon, 2004; Terrill & Mastrofski, 2002), and still others suggest that the effect

of race on police use of force hinges on other factors such as compliance (Garner et al., 2002).² Likewise, the effect of civilian age on use of force is unclear. Studies have shown that officers are less likely to use force on older civilians (McCluskey & Terrill, 2005; McCluskey et al., 2005; Paoline & Terrill, 2007), but other studies suggest a more nuanced effect, such that officers appear less likely to use physical restraints against younger civilians, but more likely to use other levels of nonlethal force (Crawford & Burns, 1998; Terrill, 2005). Sun and Payne (2004) found that police were no more or less likely to use force against older civilians when responding to interpersonal conflicts, the majority of which were domestic arguments. Studies that have considered civilian mental illness suggest that these individuals are not any more or less likely to be subjected to force than others (Johnson, 2011a; McCluskey et al., 2005; Terrill & Mastrofski, 2002). Finally, civilians who have hostile and/or disrespectful demeanors appear more likely to be subjected to some level of coercive force (Engel, Sobol, & Worden, 2000; Garner et al., 2002; James, James, & Vila, in press; Sun & Payne, 2004). Based on the extant literature, it is clear that civilian behavior and context surrounding incidents impact law enforcement officers' use of force. Both the research on real and perceived danger associated with domestic violence incidents and scholarly attention to the correlates of officers' decision to use force provide a useful framework for examining fatal shootings of civilians by police officers, and comparing civilian behaviors across incident types; the implications for understanding officer responses are significant.

The Current Study

² Experimental studies that have examined the effect of civilian race on officers' decision to use deadly force in simulated environments are also mixed; some suggest officers are quicker to shoot minority civilians (Correll, Park, Judd, & Wittenbrink, 2007; Correll et al., 2007) while more recent research suggests officers are slower to shoot minority civilians (James, Vila, & Daratha, 2013; James, James, & Vila, 2016).

Despite domestic disturbance incidents comprising a large number of incidents to which officers respond, it is still unclear whether these incidents present a unique threat to responding officers compared to other incidents. Fortunately, with newly available data compiled by media outlets, we can begin to assess whether domestic disturbance incidents that resulted in fatal shootings involved more/less threatening civilian behaviors than other incidents that resulted in the same outcome. Doing so could be informative, in light of the possibility that these incidents may be approached differently by officers due to long-held perceptions about domestic disturbances. In this study, we examine over 1,500 cases in which a civilian was fatally shot by a U.S. police officer, and consider whether domestic disturbance cases were more likely than other incidents to: (a) involve a civilian armed with a firearm or toy/replica firearm, and/or (b) involve a civilian who posed an imminent threat to officer or another person's safety. It is our hope that this study contributes to the broader literature on fatal shootings as well as a better understanding of law enforcement responses to domestic violence.

Methodology

The data used in the present study were compiled by *The Washington Post*, and include 1,501 fatal shootings of civilians by U.S. police officers between January 1, 2015 and July 7, 2016. Staff at *The Washington Post* have been collecting this data since 2015 through searches of local news reports, various websites, social media, and open-records requests with involved police departments (Tate et al., 2016). These data are limited to fatal shootings of civilians by on-duty officers and do not include any non-fatal shootings or shootings in which an officer missed the civilian. Although it is uncertain whether the data include *every* fatal shooting that occurred during this time span, we are convinced these are the most complete data available to date. Researchers have already noted that official data compiled by the SHR and National Vital

Statistics System (NVSS) seriously undercount the annual number of fatal shootings (Williams, Bowman, & Jung, 2016; Zimring, 2017), and that the totals reported by *The Washington Post* are roughly equivalent to the totals reported by other media-compiled and crowd-sourced data (Campbell, Nix, & Maguire, in press; Legewie & Fagan, 2016).³

Dependent variables. Two outcome variables were analyzed in this study. First, we predicted whether the fatal shooting involved a civilian who was armed with a *firearm* (1 = yes; 0 = no). This measure distinguished between incidents involving civilians armed with a firearm or toy/replica firearm and all other incidents (e.g., unarmed citizens; citizens armed with a knife; citizens armed with another type of weapon). We operationalized the outcome in this manner because persons who are armed with a firearm arguably pose the greatest threat to officers and others (e.g., Crifasi et al., 2016). Only seven police officers were fatally assaulted with a weapon other than a firearm from 2008 to 2013; 268 officers were killed by gunfire during the same span (Zimring, 2017). According to Breul and Keith (2016), among domestic disputes resulting in an officer's death from 2010 – 2014 (n=20), all but one involved the use of a firearm. Nevertheless, it should be emphasized that even unarmed persons can pose a significant threat to themselves, officers, and others (Klinger & Slocum, 2017). In considering this point, we predict a second outcome variable as well.

The second outcome variable was whether the civilian who was fatally shot posed an *imminent threat* to the officer or another person just prior to the shooting. This variable was initially coded as a hierarchical variable, in which the level of threat posed by the civilian – based on available information – just prior to the fatal shooting was estimated by *The Washington Post* personnel. Threat levels were coded as follows: (1) fires a gun at a person; (2) attacks with a

³ Moreover, in 2016 *The Washington Post* was awarded a Pulitzer Prize for its compilation of data on fatal shootings. See <https://www.washingtonpost.com/graphics/2016/pulitzer-prize-winner-and-finalist/>.

non-gun weapon; (3) points, brandishes, holds, or touches a firearm; (4) poses another threat (e.g., brandishes or refuses to drop a knife or weapon *other than* a firearm; threatening suicide); (5) makes a movement towards an officer (e.g., walks toward an officer; refuses an order from an officer; gestures at an officer); (6) flees; or (7) is accidentally shot by police.⁴ The first three categories were coded as the civilian posing an *imminent threat* (1 = yes) to the officer or another person just prior to the shooting, while all other categories were considered not posing an imminent threat to officers just prior to the shooting (0 = no). This coding scheme should not be interpreted as suggesting that the civilians in the “0” category were not posing some degree of threat to officers; rather, it was determined by *The Washington Post* team that these other incidents did not qualify as posing an *imminent* threat to an officer or other persons just prior to the shooting, based on the information available to team at the time of coding.

Independent variables. To assess whether fatal shootings involving domestic disturbance incidents differed from other calls for service and officer-initiated actions, we accounted for the type of incident that precipitated the fatal shooting. Specifically, we compared *domestic disturbance* (reference category) to seven other incident categories, including: *other crime*, *patrol*, *warrant*, *suicidal persons*, *suspicious persons*, *traffic*, and *other*.⁵ Each variable was dichotomized (1 = yes; 0 = no). *Domestic disturbance* refers to all incidents that could be definitively classified as a domestic disturbance. *Other crime* refers to incidents involving other known crimes, such as burglary, home invasion, theft, or kidnapping, among others. *Patrol* refers to incidents officers happened upon while patrolling a neighborhood. *Warrant* refers to incidents occurring when officers were serving some formal order, such as a warrant, restraining order, or

⁴ *The Washington Post* investigative team extensively reviewed and discussed each incident, and attempted to reach consensus about where on the threat continuum to place the civilian.

⁵ We thank the staff at *The Washington Post* for providing us with these data.

eviction notice. *Suicidal persons* and *suspicious persons* refer to calls regarding a suicidal person and suspicious person (e.g., wellness check, erratic person), respectively. *Traffic* refers to incidents occurring at a traffic stop. *Other* refers to all incidents that could not be more specifically classified (e.g., 911 call).

Control variables. Based on research pertaining to the predictors of officer use of force discussed above, a number of additional variables were included in the models to control for other factors that may confound the relationship between incident type and our outcomes. Civilian race/ethnicity was coded as *White* (reference category; 1 = yes; 0 = no), *Black* (1 = yes; 0 = no), and *other race/ethnicity* (1 = yes; 0 = no). Civilian *age* was measured continuously. *Mental illness* (1 = yes; 0 = no) refers to whether the civilian displayed any signs of mental illness at the time of the incident. Region of the country as defined by the Uniform Crime Report was also included in our models: *Northeast* (1 = yes; 0 = no), *Midwest* (1 = yes; 0 = no), and *West* (1 = yes; 0 = no) were compared to *South* (reference category; 1 = yes; 0 = no).

Analyses

Our analysis proceeded in three steps. First, we excluded 91 shootings for which *The Washington Post* could not determine either (a) whether the civilian was armed with a weapon, or (b) whether the civilian posed an imminent threat. We excluded an additional ten shootings that were deemed accidental. Second, we present descriptive statistics of the remaining 1,400 fatal shootings compiled by *The Washington Post* from January 1, 2015 to July 7, 2016. Third, because our measures of threat posed by the civilian are dichotomous, we estimated two multivariate logistic regression models using StataSE 14. We first examined whether incident type was associated with the likelihood of a civilian having been armed with a firearm just prior to being fatally shot by an officer, net of control variables. We then estimated a second logistic

model which regressed incident type and our controls onto *imminent threat*. In short, these analyses examined whether incident type was significantly associated with our measures of civilian behavior, net of the influences of other feasibly important factors.

Several diagnostic tests revealed that no harmful levels of collinearity were present in the multivariate models in this study. All of the bivariate correlations were below .50, with the exception of the correlation between *suicidal person* and *mental illness* (Pearson's rho = .92). Nevertheless, all variance inflation factors fell below 2.10 (Tabachnick & Fidell, 2013), and all condition indices fell below the commonly accepted threshold of 30 (Mason & Perrault, 1991). Multiple imputation with chained equations (10 imputations) was used to handle a small amount (approximately 2 – 3 %) of missing data for *incident type*, *race*, and *age*. According to McKnight and colleagues (2007, p. 196), multiple imputation is “the most highly praised method for statistically handling missing data” (see also Allison, 2002; Rubin, 1996; Schafer & Graham, 2002).⁶

Results

As shown in Table 1, 64 percent of the civilians fatally shot by law enforcement officers were armed with a firearm or toy/replica firearm, while 71 percent posed an imminent threat to the police officer or others just prior to the shooting. Sixteen percent of the fatal shootings involved domestic disturbance incidents. In this data, roughly 57 percent of civilians in domestic disturbances were armed with a gun at the time of the fatal shooting, relative to 65 percent of civilians involved in other incidents (results not shown). Sixty-eight percent of civilians involved in domestic disturbances who were fatally shot posed an imminent threat to the police officer just

⁶ We extend our thanks to an anonymous reviewer for suggesting we use multiple imputation.

prior to the shooting, compared to almost 72 percent of civilians in other incidents (results not shown).

[Table 1 About Here]

Table 2 presents the findings from our first logistic model predicting the likelihood that the civilian who was fatally shot was armed with a firearm. Among the fatal shootings, civilians involved in incidents related to the commission of another crime ($b = .950, p \leq .01$, odds ratio = 2.587), involved in officers serving a warrant ($b = .681; p \leq .01$, odds ratio = 1.976), and suicidal persons ($b = .961, p \leq .01$, odds ratio = 2.614) were more likely than civilians involved in domestic disturbance incidents to be armed with a firearm just prior to the fatal shooting. No other differences emerged in the likelihood that the civilian was armed with a firearm when comparing domestic disturbances to other incidents. Additional significant effects emerged in regards to civilian characteristics and region of the country. Older civilians were more likely than younger civilians to have been armed with a firearm at the time of the fatal shooting. Civilians in the “other” racial/ethnic group and civilians exhibiting signs of mental illness were significantly less likely to be armed with a firearm than White civilians and civilians not exhibiting signs of mental illness, respectively. Lastly, fatal incidents in the northeast and west were less likely than incidents in the south to involve civilians armed with a firearm.

[Table 2 About Here]

Table 3 presents the findings from our second logistic model which predicted the likelihood that the civilian posed an imminent threat to officers or other civilians just prior to the fatal shooting. Compared to civilians in domestic disturbance incidents, those involved in incidents related to the commission of another crime ($b = 0.616, p \leq .01$, odds ratio = 1.852) and suicidal persons ($b = 0.601, p \leq .05$, odds ratio = 1.824) were more likely to pose an imminent

threat just prior to the fatal shooting. Domestic disturbance incidents were not significantly different from the other five types of incidents in regards to whether or not the civilian posed an imminent threat to the officer or another person just prior to the fatal shooting. Similar to the findings in Table 2, older civilians were more likely than younger civilians to have been determined to pose an imminent threat just prior to the fatal shooting. Civilians in the “other” racial/ethnic group and civilians who were exhibiting signs of mental illness were less likely to pose an imminent threat to officers or other persons just prior to the shooting compared to White civilians and civilians not exhibiting signs of mental illness, respectively.

[Table 3 About Here]

Discussion and Conclusion

There is a longstanding belief that domestic disturbance incidents are especially dangerous to responding law enforcement officers. However, extant empirical research does not fully support this notion. The present study took advantage of newly available data to approach this issue from a different angle, namely, by examining whether there are differences in civilian behavior between incident types prior to a fatal shooting. We considered fatal shootings of civilians by police officers to represent incidents officers felt some level of threat or danger. Then, among these incidents perceived to be danger-laden or threatening, we considered whether fatal shootings that stemmed from a domestic incident were more likely than fatal shootings that stemmed from other types of calls to involve civilians (a) armed with a firearm and (b) posing an imminent threat to officer safety or the safety of other civilians. Several of our findings warrant a more in-depth discussion.

The results of this study suggest that in the overwhelming majority of cases involving officer uses of fatal force against a civilian, the civilian was armed with a firearm and/or posed

an imminent threat to the officer or another person just prior to the shooting. Therefore, most of the incidents likely reflect officers' last resort tactics to control the situation, which is consistent with the notion that officers who use fatal force felt there was a significant threat to officers or others. Sixteen percent of the incidents in this study involved domestic disturbances – the second largest category of incidents in which officers fatally shot a civilian. The largest category of incidents resulting in the fatal shooting of a civilian involved officers responding to another crime (25 percent of incidents), including, but not limited to robbery, burglary, and theft.

Based on these findings, then, one could potentially make the argument that because domestic disturbance incidents comprised a sizeable proportion of fatal shootings by police, these incidents are particularly dangerous to responding officers and require a different response by officers. However, it is worth reiterating that these data *only* include incidents in which a civilian was killed by police gunfire, and therefore, does not account for all domestic disturbance incidents involving law enforcement response. This caveat is extremely important, considering that domestic violence cases comprise the single largest category of violent offenses that officers respond to in a given year (Sherman, 1992).

Bivariate analyses suggested that when compared to other fatal shooting incidents, a smaller percentage of civilians in domestic disturbance cases resulting in the fatal shooting of a civilian were armed with a firearm at the time of the fatal shooting (57 percent versus 65 percent of civilians in non-domestic disturbance incidents) compared to other incidents. A similar finding emerged when examining the likelihood that a civilian posed an imminent threat just prior to the shooting: 68 percent of domestic disturbance incidents versus 72 percent of other incidents were determined to pose an imminent threat. These findings support the notion that all types of incidents can present a significant threat to responding officers; however, these bivariate

analyses do not indicate that domestic disturbance incidents resulting in the fatal shooting of a civilian by a police officer were more likely to invoke the threatening behaviors of the civilian (e.g., armed with a firearm; imminent threat) compared to other incidents.

Nevertheless, for a more nuanced examination of the data, we turn to a discussion of the multivariate models. Based on these models predicted in this study, some differences between domestic disturbances and other incidents emerged in the likelihood that the civilian possessed a firearm and/or posed an imminent threat to the officer and/or other persons. Specifically, the civilian was less likely to be armed with a firearm or pose an imminent threat in domestic disturbance incidents compared to incidents involving other crimes and suicidal persons. Moreover, officers were less likely to be met with a civilian armed with a firearm when responding to a domestic disturbance incident when compared to serving a warrant. No other significant differences between domestic disturbances and other incident types emerged.

Overall then, despite perceptions of the danger to police associated with domestic disturbance incidents, overall, domestic disturbances do not appear to differ greatly from most other incidents resulting in fatal force in regards to the outcomes included in this study. Fatal shootings of civilians involved in the commission of another crime who were armed with a firearm or posed an imminent threat just prior to the shooting is consistent with prior research that has found officers are more likely to use force when there is evidence that a crime has been committed at the incident to which they are responding (McCluskey & Terrill, 2005; McCluskey, Terrill, & Paoline, 2005; Sun & Payne, 2004). In addition, prior research has considered the police response to persons expressing potential suicidality. Homant and colleagues' (2000) study – which provides an in-depth review of earlier research on “suicide by cop” – suggests that these types of incidents do pose a threat to law enforcement officers, and notes that it is very difficult

to determine the danger affiliated with these cases from the beginning. Finally, our findings square well with those of Uchida et al. (1987), who found that in terms of injuries sustained by officers, domestic disturbances were less dangerous than serving warrants.

Aside from research examining incidents resulting in assaults, injuries, and deaths to police officers, there is a lack of research examining specifically *why* officers perceive domestic disturbance cases to be particularly dangerous, which may affect officer responses. Based on the outcomes in this study, domestic disturbance incidents resulting in the fatal shooting of a civilian by an officer were largely indistinguishable from most other incident types in terms of civilian behavior prior to the shooting (with the above three exceptions). Nevertheless, it is possible that the two outcomes included in this study do not fully capture why officers may perceive domestic disturbances to be dangerous to their safety. Future research can assist with addressing this possibility.

Future Research

Future research should continue to examine data on fatal shootings by police to better inform safety considerations for officers and civilians. Moreover, as it pertains to the danger associated with domestic violence research, scholars should consider exploring additional outcomes that may indicate a level of danger to the officer, beyond whether a firearm was used or whether the suspect posed an imminent threat as coded by *The Washington Post* team that compiled the current data. For example, research on levels of resistance and threat from a civilian relative to an officer (e.g. MacDonald et al., 2003) can provide a better understanding of police use of force and how officers perceive the need to use force when dealing with dangerous situations. In addition, although most domestic disturbance incidents involving officer fatalities involve the use of a firearm (Breul & Keith, 2016), Federal Bureau of Investigation *Law*

Enforcement Officers Killed and Assaulted (LEOKA) data suggests that that the majority of assaults on officers resulting from disturbance calls (many of which are domestic in nature) involved the civilian using a personal weapon (i.e., hands, fist, feet) to assault the officer, and a much smaller percentage involved the use of a firearm (Federal Bureau of Investigation, 2016). Therefore, future research should consider additional outcomes that can shed light on this important issue.

In addition, future research should continue to address the ways that officers view domestic disturbance cases, particularly the danger that they perceive is associated with these incidents, to help determine if it affects their responses. Although the possible implications that officers' approaches may have for the use of force are clear, other outcomes are important to consider as well. For example, officers' pre-conceptions of domestic violence (e.g., DeJong et al., 2008; Horwitz et al., 2011) may impact their interactions with victims of domestic violence, as well. Research has identified that officer-victim interactions (e.g., Wolf et al., 2003) and officers decision-making (e.g., Buzawa et al., 2007; Hickman & Sampson 2003), may impact the likelihood of a victim of domestic violence seeking police assistance in the future. Overall, additional research in officer perceptions of responding to calls for domestic disturbance incidents will not only contribute to the discussion about police responses to domestic violence, but may also be fruitful for guiding future training efforts.

Limitations

Despite this study's contribution to the discussion of police responses to domestic disturbance incidents, there are some limitations. The first is the data itself. The data collection efforts emerged after criticisms that our understanding about police use of force nationwide is limited by a lack of reliable official data (see Swaine & Laughland, 2015) and at the call of

researchers unto the federal government to collect more complete data (Alpert, 2015; Fyfe, 2002; Klinger, 2012). However, some scholars have expressed concern with *The Washington Post's* classification of some variables (e.g., unarmed), and argued that these data were “constructed by a group of journalists, rather than through a carefully crafted social scientific process” (Klinger & Slocum, 2017, p. 11). We attempted to overcome this concern in this study by utilizing more conservative operationalizations of our dependent variables (e.g., by predicting whether a civilian was armed with a firearm or toy/replica gun, we limit our analyses to the cases that would arguably present the *greatest* – yet certainly not the *only* – threat). Still, we believe that *The Washington Post* dataset is the most comprehensive data on police shootings in the United States to date, and are confident that the staff at *The Washington Post* are professional, well-trained, and spent considerable time discussing the nuances of each incident before deciding how to code each variable. Nevertheless, the quality of the data should be considered when interpreting the findings of this study.

Second, although both multivariate models were statistically significant, and a number of variables reached statistical significance in each model, it is still possible that our models may have failed to capture some important predictors of the outcomes in this study. It is clear that police use of fatal force resulting in the death of a civilian is a complex issue, and statistical analyses need to reflect such complexities. Klinger and Slocum (2017) also expressed concern with the lack of available variables in *The Washington Post* dataset that could be controlled for when exploring meaningful relationships between the independent and dependent variables of interest. Although this limitation is partially due to the relative infancy of new data collection endeavors in this area, it must be addressed. As data collection efforts continue, the inclusion of other relevant factors in analyses such as these will be critical.

In addition, this study only examined fatal shootings, which is only a small indicator of police use of force, and an incomplete indicator of the danger faced by law enforcement officers. Specifically, the data did not include non-fatal shootings or shootings in which the officer missed the civilian. Therefore, the incidents included in this study do not capture the full range of incidents involving police use of force. The inclusion of non-fatal shootings and misses could better contribute to our understanding of the danger that different types of incidents pose to responding police officers, but unfortunately these data are not collected on a national scale. Moreover, given the scope of the current data used, this study also did not include any incidents where a civilian assaulted or killed an officer before the officer had a chance to respond to the civilian's actions (e.g., ambush); such cases signal a clear and present danger to officers. This is important, as the LEOKA data suggests that just over 7 percent and 11 percent of officers who were feloniously killed between 2006 and 2015 were ambushed and were attacked in an unprovoked incident, respectively (Federal Bureau of Investigation, 2016). Moreover, between 2006 and 2015, over 2,200 officers were assaulted in an ambush situation (Federal Bureau of Investigation, 2016). Therefore, the failure to include such incidents limits our understanding of these issues.

Conclusion

Despite the aforementioned limitations, this study contributes to the extant discussion of police use of fatal force, and police response to domestic disturbance incidents. Both areas are extremely important from community and police officer safety standpoints. The former has received much recent attention due to a number of high-profile incidents, which have sparked community activism efforts. The latter is frequently cited as a concern among the law enforcement community, particularly when incidents involving officer fatalities from responding

to domestic-related incidents arise. As Zimring (2017) argues, we must treat threats to officer safety, the use of fatal force by police officers , and civilian safety as equally important pieces of the same puzzle so that we can begin to develop constructive strategies to prevent threats to officers and civilians, alike. Fortunately, with new national data collection efforts, we are on the way to examining important issues that have significant implications for community and police officers' safety.

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Table 1. Descriptive statistics for variables used in logistic models (N = 1,400).

	Mean/Percent
<i>Dependent variables</i>	
Firearm	.641
Imminent threat	.711
<i>Independent variables</i> ^a	
Other crime	.243
Patrol	.045
Warrant	.091
Suicidal person	.072
Suspicious person	.150
Traffic	.116
Other	.121
<i>Controls</i>	
Black ^a	.259
Other race/ethnicity ^a	.218
Age ^{a, b}	36.574
Mental illness	.259
Northeast	.076
Midwest	.161
West	.351

NOTE: Prior to summarizing the data, we removed 10 cases involving accidental shootings and 91 cases with missing data for the dependent variables. All variables with the exception of *age* are binary (0 – 1).

^a Each of these variables had approximately 2 – 3 percent missing data which we imputed using MICE. Values reported here reflect averages across 10 imputations.

^b *Age* ranges from 6 – 86, standard deviation = 13.026.

Table 2. Logistic regression model predicting whether the fatally shot civilian was armed with a *firearm*.

	<i>b</i>	SE	Odds Ratio
Incident Type^a			
Other crime	.950**	.196	2.587
Patrol	.576	.311	1.778
Warrant	.681**	.246	1.976
Suicidal person	.961**	.290	2.614
Suspicious person	-.013	.201	.987
Traffic	.081	.217	1.085
Other	.208	.213	1.231
Civilian Characteristics			
Black ^b	-.118	.151	.889
Other race/ethnicity ^b	-.436**	.154	.646
Age	.011*	.005	1.011
Mental illness	-.365*	.150	.694
Region of Country^c			
Northeast	-.520*	.223	.594
Midwest	-.043	.173	.958
West	-.305*	.141	.737
Intercept	.157	.269	—
<i>N</i>		1,400	
<i>F</i> test		5.38**	

* $p \leq .05$; ** $p \leq .01$

^aReference category is *domestic disturbance*

^bReference category is *white*

^cReference category is *south*

Table 3. Logistic regression model predicting whether the fatally shot civilian posed *an imminent threat*.

	<i>b</i>	SE	Odds Ratio
Incident Type ^a			
Other crime	.616**	.207	1.852
Patrol	.672	.352	1.958
Warrant	.261	.252	1.299
Suicidal person	.601*	.295	1.824
Suspicious person	-.208	.213	.812
Traffic	.095	.233	1.100
Other	.307	.233	1.359
Civilian Characteristics			
Black ^b	-.141	.162	.868
Other race/ethnicity ^b	-.424**	.163	.655
Age	.011*	.005	1.012
Mental illness	-.520**	.154	.595
Region of Country ^c			
Northeast	.057	.243	1.058
Midwest	.238	.185	1.269
West	-.085	.147	.919
Intercept	.505	.286	—
<i>N</i>		1,400	
<i>F</i> test		3.80**	

* $p \leq .05$; ** $p \leq .01$

^aReference category is *domestic disturbance*

^bReference category is *white*

^cReference category is *south*

Appendix A: Bivariate correlations

Table A1. Bivariate correlation matrix.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13 ^a	14	15	16	17
1 Firearm	—																
2 Imminent threat	.78*	—															
3 Domestic	-.12*	-.06	—														
4 Other crime	.25*	.17*	-1.00	—													
5 Patrol	.05	.11	-1.00	-1.00	—												
6 Warrant	.12	.04	-1.00	-1.00	-1.00	—											
7 Suicidal person	.12	.03	-1.00	-1.00	-1.00	-1.00	—										
8 Suspicious person	-.22*	-.22*	-1.00	-1.00	-1.00	-1.00	-1.00	—									
9 Traffic	-.09	-.03	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	—								
10 Other	-.08	.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	—							
11 Black	.04	.02	-.27*	.17*	.13	.08	-.34*	.03	.14*	-.11	—						
12 Other race/ethn.	-.18*	-.15*	-.01	.03	.06	-.09	-.17*	.08	-.04	.05	-1.00	—					
13 Age ^a	.05	.05	.17*	-.16*	-.01	.02	.11*	-.02	-.10*	.07*	-.22*	-.10*	—				
14 Mental illness	-.10*	-.17*	-.07	-.35*	-.19*	-.20*	.92*	.24*	-.39*	.07	-.29*	-.11*	.10*	—			
15 Northeast	-.10	.02	.01	.02	.02	.11	.11	-.12	-.14	.00	.11	-.17*	.03	.16*	—		
16 Midwest	.06	.10	-.01	.02	-.11	.03	-.01	.02	.05	-.07	.16*	-.39*	-.02	-.01	-1.00	—	
17 West	-.14	-.10*	-.01	-.02	.01	-.14	.04	.11*	-.10	.08	-.46*	.56*	-.03	-.01	-1.00	-1.00	—

^a Coefficients displayed for *age* are Pearson's *r* ($N = 1,325$), all other coefficients are Pearson's rho ($N = 1,337$); * $p < .05$