Exploring the Relationship Between Incident Initiation and Fatal Police Violence

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I. Abstract

Understanding how fatal police force is initiated is critical to developing effective reforms. This paper examines the relationship between police force and how encounters begin, specifically comparing 911-initiated calls to officer-initiated calls. Using data from Campaign Zero's Mapping Police Violence Database and the Bureau of Justice Statistics' Police-Public Contact Survey, we assess how initiation type, race, and mental health factors shape the likelihood of force. We also analyze departmental policies and case studies to identify structural influences on fatal outcomes. Our findings suggest that officer-initiated interactions are associated with lower rates of violence than those stemming from 911 calls. While there is no significant interaction between race and type of initiation, race is significantly correlated with fatal outcomes. Additionally, incidents involving mental health concerns often escalate under current dispatch protocols. We recommend modifying 911 procedures to integrate behavioral health professionals, investing in public education campaigns, and implementing centralized data systems to guide resource allocation. Using the New Orleans case study, we propose institutional reforms like bias-free training and revised use of force policies to reduce race-related and improve fatal outcomes once force is initiated.

II. Table of Definitions

ACS	Albuquerque Community Safety
APD	Albuquerque Police Department
BJS	Bureau of Justice Statistics
CARE	Crisis Assistance Response and Engagement
CPD	Chicago Police Department
MPV	Mapping Police Violence
NOPD	New Orleans Police Department
PPCS	Police-Public Contact Survey

III. Introduction

In the United States, police violence is a pressing public concern. Certain communities, particularly minorities, are disproportionately affected by police use-of-force. While prior studies have documented racial and demographic disparities in police killings, fewer have examined how the circumstances of police encounters—such as whether they are initiated by officers or triggered by civilian calls for service (911 calls)—affect the likelihood of fatal use of force.

For this reason, this study aims to explore the relationship between incidents of police force and their method of initiation, and determine what factors differ between these incidents. This paper seeks to fill this gap by comparing two national datasets: the Mapping Police Violence (MPV) database, which catalogs incidents where individuals were killed by police, and the Bureau of Justice Statistics (BJS) Police-Public Contact Survey, which provides a representative sample of general police encounters. By integrating and harmonizing these datasets, we analyze how initiation type influences the likelihood that an encounter results in a police killing, incorporating factors such as race, gender, and age. Our aim is to identify patterns that may reflect structural biases in law enforcement practices and to provide an empirical foundation for policy interventions aimed at reducing police's use of force.

IV. Literature Review

Understanding the Differences between 911-Initiated and Officer-Initiated Incidents

The two main ways in which police encounters are initiated are through 911 calls and officers using their discretion. 911-initiated incidents are calls made to the emergency number 911. These calls can be made for emergencies such as crimes, accidents, or threats to life or property.

911-initiated incidents are often characterized by priority. For example, in St. Paul, Minnesota, 911 calls are categorized by Priority One (P1), Priority 2 (P2), and Priority (P3) - emergency, Priority 4 (P4) - Urgent, and Priority 5 (P5) - Routine Calls. In four out of five cities (Camden County, Tucson, Detroit, New Orleans, and Seattle), the most frequent incident type was some variation of a complaint or request for an officer to perform a welfare check[1]. This adequately supports the VERA hypothesis that a majority of calls are for disturbance of peace complaints, not crimes in progress. However, high priority crimes often have the fastest response times—in these situations, 911 dispatchers play an important role in deciding how thorough they will be in obtaining information, and what information they pass on to officers despite the urgency of the situation.[2]

[1] Vera Institute of Justice, n.d.
[2] Vera Institute of Justice, n.d.

Frequently, the effects of inadequate and unstandardized training, lack of consistent protocol, and racial biases are passed from 911 dispatchers onto the emergency department and acted on by the police, sometimes resulting in escalated use of force. For example, if a dispatcher incorrectly informs an officer that a subject is armed, they are more likely to incorrectly shoot them.[3] Thus, procedures that dictate how 911 dispatchers handle calls and pass on information to officers are important because of their role in "priming" officers on what to expect. The procedure for dispatchers handling 911 calls often lacks "strong governance over the risk appraisal process" which leaves call-takers to use their own subjective discretion[4]. In other words, the delineation between high- and low-priority calls is not always clear, and it is up to the dispatcher to use their discretion in those situations. Consequently, adequate training is crucial, yet in a survey released at the online national conference of 911 leaders, "about 38% of those surveyed said they were not well prepared to handle active shooter calls. About 25% said they needed more training around mental health calls" [5].

On the other hand, officer-initiated incidents are situations where law enforcement officers engage in activities based on their own observations or decisions, rather than in response to calls from the public. These activities can include traffic stops, patrols in high-crime areas, or initiating investigations based on observed suspicious behavior. According to a report by the National Policing organization, research indicates that approximately 45% of officer-involved shootings (OIS) stem from officer-initiated actions, with the remaining 55% resulting from citizen-initiated calls[6]. Notably, 17% of officer-initiated incidents lead to officer injuries, compared to 12% for citizen-initiated incidents[7]. The nature of officer-initiated incidents varies, encompassing activities such as traffic stops, proactive patrols, and responses to observed criminal behavior. In 2018, about 11% of U.S. residents experienced a police-initiated contact, with 8.1% being stopped as drivers. The report notes that 2% of all police contacts involved threats or use of force, with racial disparities present in the likelihood of experiencing force[8]. Understanding the characteristics of officer-initiated incidents is crucial for developing effective policing strategies, training programs, and policies that enhance both officer and public safety.

With 911-initiated incidents, the call takers act as gatekeepers and risk appraisers by extracting, interpreting, and classifying information. Since 911 call taking in general lacks "strong governance over the risk appraisal process", it usually leaves call - takers to use their own subjective discretions classifying and event as A (high acuity) or B (mid acuity)[9]. Their discretion significantly affects how incidents are characterized and escalated, can "prime" officers by framing incidents as high priority, which may lead to a heightened response. While 911-initiated incidents with use of

[3] Butler, 2023
[4] Mann, 2024
[5] Associated Press, 2023
[6] National Policing Institute, 2020
[7] DeAngelis, Benz, and Gill, 2019
[8] Langton, 2015
[9] Stanford Law School 2023

force focus on the discretion of the call-taker, officer-initiated incidents tend to focus on officer discretion in applying proportional response to the subject[10]. However, this proportional response can be affected by other factors such as race. It is more likely to use force when encountering young, male, black and poorer suspects.[11] This discrepancy indicates that race plays a significant role in how officer-initiated incidents progress. Additionally, the case *Whren vs the US* shows how the Supreme Court has played a factor in officer-initiated incidents, seeing as "in practice, the Whren decision has given the police virtually unlimited authority to stop and search any vehicle they want"[12].

Patterns in Police Use of Force Across Race and Mental Health

Whether during police-initiated incidents or in citizen-initiated incidents, patterns of police use of force are well documented by academic literature when analysed in the context of racial bias and mental health. In general, police use force at disproportionately higher rates against Black people as opposed to White people. The evidence also suggests that officer race plays a significant role in those disparities, with White officers being more likely to use force in Black neighborhoods than their Black counterparts. Additionally, interactions involving individuals with mental health are associated with higher rates of police use of force. This section explores these patterns and how both race and mental health contribute to the dynamics of police use of force.

Several studies have examined the relationship between racial bias and police use of force. A report by non-profit Mapping Police Violence indicates that in 2022, the police used force at a rate 3.2 times higher against black people than white people. The pattern of discrimination continues when we look exclusively at lethal force, as law enforcement killed African Americans at a rate 2.6 times higher than white people[13]. This data demonstrates that police-use-of-force remains disproportionate between races despite the nationwide BLM protests. According to Mapping Police Violence Database, U.S. police use force on approximately 300,000 individuals annually: an upward trend since George Floyd's murder[14]. Black individuals are subjected to nonfatal police violence at 3.2 times more than White individuals, and fatal police violence occurs at a rate 2.6 times higher. Less than 40% of occurrences stemmed from reports of crime, suggesting that many encounters were officer-initiated rather than responses to civilian reports. Half of police agencies report an increase in police force incidents post-2020; jurisdictions that expanded law enforcement budgets saw higher rates of force. However, targeted policy interventions have been shown to be effective: the banning of neck restraints led to a 90% reduction in their use between 2019 and 2021, and specific U.S. Department of Justice reform agreements have resulted in a 22% decrease in forceful incidents.[15]

[10] Terrill 2005
[11] Ibid
[12] Langton, 2015
[13] Levin, 2024
[14] Levin, 2024
[15] Levin, 2024

Empirical research also underscores the significant role of officier race in police use of force. Hoekstra and Sloan's study of 1.6 million 911 calls found that White officers used force 60% more often than Black officers, and were over five times more likely to use firearms in predominantly Black neighborhoods, despite identical response protocols[16]. The study also found that 14% of White officers were flagged for violence in Black communities compared to only 4% of Black officers. Interestingly, most police shootings originated from 911 calls, suggesting that racial disparities in shootings may not be directly downstream of officer bias in initiating police action. However, Fryer's analysis indicates that racial differences are still pronounced in nonlethal uses of force during officer-initiated encounters, where Black and Hispanic individuals experience significantly higher rates of violence.[17] In addition, a date study,"Stop, Frisk, and Assault? Racial Disparities in Police Use of Force During Investigatory Stops," used data from 2 million New York police stops from 2007 to 2014 to confirm this trend. This study found that Black civilians were 27% more likely to experience violence and 28% more likely to have a gun drawn on them than White civilians. These findings are consistent with the findings of another research paper that analysed roughly 5 million police stops from 2003 to 2013 and found that Black and Hispanic people are 50% more likely to experience nonlethal use of force than White people[18]. Moreover, researchers from the Stanford Computational Policy Lab analysed over 100 million patrol stops across all 50 states and determined that officers had significantly lower thresholds of evidence needed to stop Black and Hispanic civilians when compared to White civilians[19].

In addition to racial disparities, mental health is another critical factor influencing police use of force. Studies indicate that individuals with mental health conditions are significantly more likely to experience force with law enforcement. The Illinois Criminal Justice Information Authority, for example, estimates that anywhere from 7-10% of police encounters involve citizens with a mental health condition, and 25% of all individuals with mental illnesses had been arrested at some point in their life. Moreover, officers who encounter individuals with mental health conditions are 1.4 to 4.5 times more likely to use force[20]. The risk of fatal outcomes are even more alarming. Individuals with untreated mental health conditions are 16 times more likely to be killed in interactions with law enforcement, with an estimated one in four fatal police shootings involving someone with a mental illness[21]. A critical distinction in mental-health related police encounters has to do with the interaction's origins, as these incidents are much more likely to begin with a 911 call rather than officer initiation. The NIH conducted a study of mental health-related call resolutions in the city of Chicago, and found that out of 428 calls, approximately two-thirds were dispatch-initiated. Moreover, fatal shootings involving individuals with mental health issues were far more likely to be initiated by a 911 call than by an officer.[22] These statistics demonstrate that individuals with mental

[16] Hoekstra and Sloan, 2022
[17] Fryer, 2016
[18] Kramer and Remster, 2018
[19] Stanford University, 2015
[20] Gatens, 2018; Watson et al., 2021
[21] Fuller et al., 2015
[22] Watson et al., 2021

health conditions are disproportionately violent. The role of dispatcher is particularly significant as their decisions influence whether officers trained in mental health crises or regular officers respond to the scene. This distinction plays a key role in determining the nature of the interaction and the likelihood of force being used.

V. Methodology

The objective of this data analysis is to determine the relationship between the method of initiation – 911 calls vs. officers – and whether the outcome of a police interaction resulted in a fatality. We used data from Campaign Zero's Mapping Police Violence project,which tracks fatal contact between the police and citizens, and the Bureau of Justice Statistics' Police-Public Contact Survey, which is a survey on all non-fatal contact. Crucially, this analysis does not seek to establish a causal relationship between the outcome and initiation of an event, but rather to identify trends and patterns between these and other variables. While initiation may play a significant role in the outcome of a police encounter, other factors certainly do too. This study specifically focuses on race as a secondary variable of interest, and includes other factors like age and gender, but it cannot account for all potential explanations of outcomes. For example, the reason behind an encounter likely plays a large role in whether it leads to a fatality - a call about an armed intruder has a much higher potential for violence than a simple wellness check, regardless of other factors. Thus, our conclusions are inherently limited, and should primarily be used to guide where police violence can be mitigated. Rather than be viewed as a judgement on initiation type, this analysis should be viewed in the larger context of how police encounters can play out.

Data Collection

Data on police encounters includes both incidents that ended in a fatality and those that did not. Cases of violent crimes were retrieved from Campaign Zero's Mapping Police Violence (MPV) project, which is publicly available on their website. This dataset records all incidents in the U.S. where police officers killed a citizen, from 2013 to 2024. For this study, we only considered cases from 2020 and onward, as Campaign Zero indicated that the information from these more recent cases had been reviewed more thoroughly and was therefore more accurate.

We used the Bureau of Justice Statistics' Police-Public Contact Survey (PPCS) to obtain a control for police encounters that did not end in violent crime. This dataset records survey responses from about 96,500 people across the U.S. and is publicly available on their website. We used 2022 data, which is the most recent survey: 2022 falls in the middle of the timeframe of the MPV data, and so offers the best approximate control for the MPV data. It includes people who had no contact with police during this time as well, but we limited our analysis to the respondents who indicated that they had some form of contact with the police. There were relatively few people who had multiple forms of contact—if these were all 911- or all officer-initiated, then they were coded

under the corresponding type of initiation. Otherwise, they were coded as having both types of initiation, and not included in the analysis.

Data Activities

Within the MPV dataset, each recorded case details demographic information on the victim as well as circumstantial information about the incident such as whether there was a call for service and whether the victim had signs of mental health issues. This data is primarily gathered from local news sources that report on incidents when police killed a civilian; it is manually reviewed for accuracy before being added to the database. Data for non-violent crime from PPCS, conducted in 2022, contains basic demographic information and the person's responses to a variety of questions about the nature of their contact with the police over the past year. This is a voluntary survey conducted as an interview with the respondent. PPCS also includes weights for each case, which allow us to extrapolate to the larger population, accounting for non-response and over-sampling biases. MPV cases were accordingly given weights of 1, as the dataset is already representative of the population.

The MPV dataset tracks whether each incident was initiated by a "call for service" (either yes, no, or unknown). This variable is not a perfect indicator of whether an incident was initiated by a 911 call or an officer. For example, a "call for service" incident may have been initiated by a 911 call, or it may be a case where a citizen approached an officer for help face-to-face. A non-"call for service" incident may be initiated by an officer or by an interdepartmental dispatch request. We conducted a manual review of 800 random cases from the MPV dataset and determined that about 93% of them correctly mapped "yes" to a 911 call and "no" to an officer-initiated event. 5.5% were listed as "call for service" but manually identified as officer-initiated, 0.3% were listed as "no call for service" but identified as 911-initiated, and the remaining were unable to be identified (likely due to a lack of details about the incident). Consequently, we determined that "call for service" was an appropriate proxy variable for initiation type within this dataset.

In the PPCS, respondents answered a series of questions on whether they had any contact with police, and what the nature of that contact was. We determined the initiation type of the encounter based on their answers to specific questions. If they answered "Yes" to reporting a crime, reporting a non-crime emergency, approaching a police officer for assistance, being involved in a traffic accident where police were involved, or otherwise seeking help from the police, then this was coded as initiation by a 911 call. These questions do not specify if the contact was via a 911 call, but nevertheless, we chose to include all these to ensure consistency with the MPV dataset. If they answered "Yes" to being stopped by police while driving, stopped by police but not while driving, stopped by police but not while in a moving vehicle, or otherwise having contact initiated by police, then this was coded as police-initiated contact. People who did not answer yes to any of these questions were removed from the dataset for having no contact with the police. A small number of people had both forms of contact, but these were removed as they comprised a relatively small portion of the total, and we were unsure of how they would affect the analysis. Repeated contact of

the same form also comprised a relatively small number of cases. These were coded under their respective initiation type and only counted once, as people who encounter police multiple times could share specific characteristics and counting them multiple times could skew the results.

We then cleaned and combined the datasets. First, we limited both datasets to only include the variables that they shared in common: initiation, sex, age, and race. This was so that we could meaningfully compare the two datasets and find patterns in the outcomes. While initiation is our main variable of interest, we believed the other variables could significantly impact the analysis, and so we included them as controls. Next, we removed any cases that were missing values in initiation, gender, age, or race. There were no missing values in the PPCS dataset, and the MPV dataset had relatively few missing values (~3.5% of the total), so this likely did not significantly impact the results.

Next, some values were re-coded to ensure consistency in the granularity of variables. For example, the MPV dataset includes exact ages, whereas PPCS uses age ranges, so we changed the ages in the MPV dataset to their respective range. This was also done for race – "Native American," "Native Hawaiian and Pacific Islander," and "Unknown" were changed to "Other" in the MPV dataset. We also removed cases with a gender other than "Male" or "Female" as this was an extremely small subset of the MPV data, and there was no corresponding value in the PPCS.

Methods of Analysis

A logistic regression was used to analyze the relationship between initiation and the outcome of police encounters. The result of this regression analysis is the probability, in log-odds, that a given person will be in the MPV dataset - which corresponds to a fatal encounter - versus the PPCS dataset - corresponding to a non-fatal encounter. Using R, we derived coefficients for the independent variable, initiation, as well as our other control variables: sex, age, and race. We also obtained p-values for each of these coefficients to indicate the significance of the data. We ran several different models to highlight the effect of including these controls. Specifically, we ran a model that only uses initiation, one that includes only initiation and race (including an interaction between them), and one that includes all control variables and an interaction effect between initiation and race. The weights of each case were included in the regression to account for PPCS being survey data.

VI. Data Analysis and Results

Introduction to the Data

While there were many variables to consider, we limited our analysis based on what information was commonly available between the two datasets. We also considered signs of mental health issues because there were significant disparities in how the variable was distributed by call for

service within the MPV dataset. The figures below present information on our variables of interest across the two datasets.

Figure 1: Distribution of Encounter Initiation in MPV and PPCS by Counts

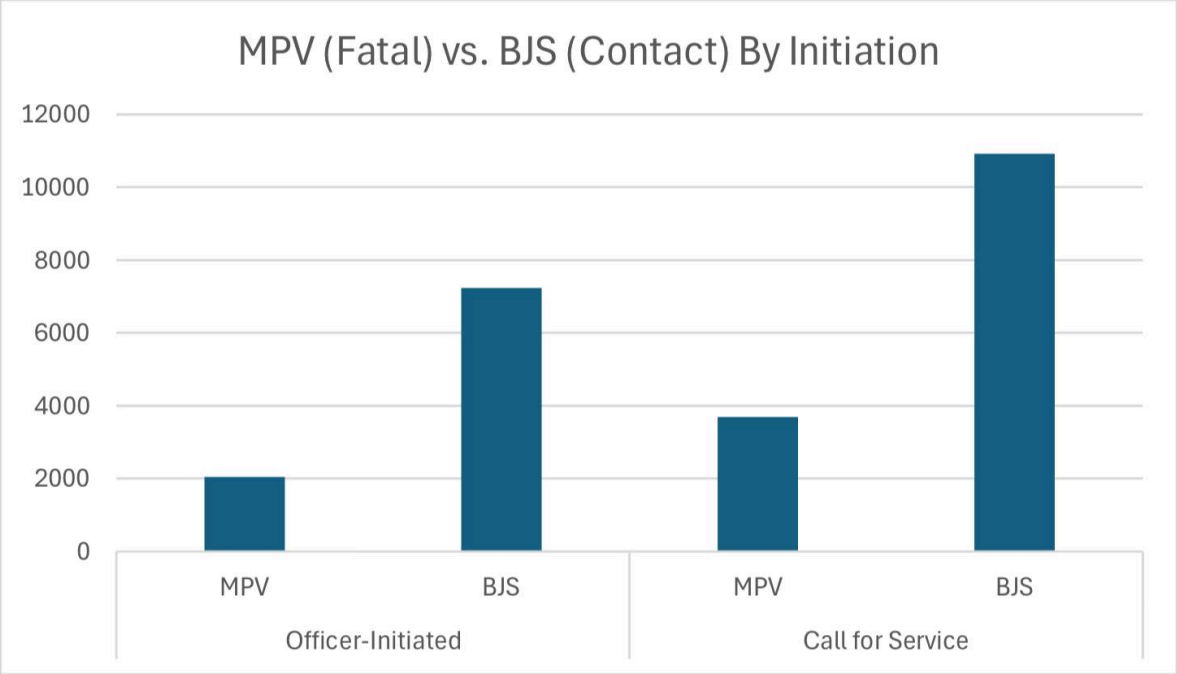


Figure 2: Distribution of Race in MPV and PPCS by Counts

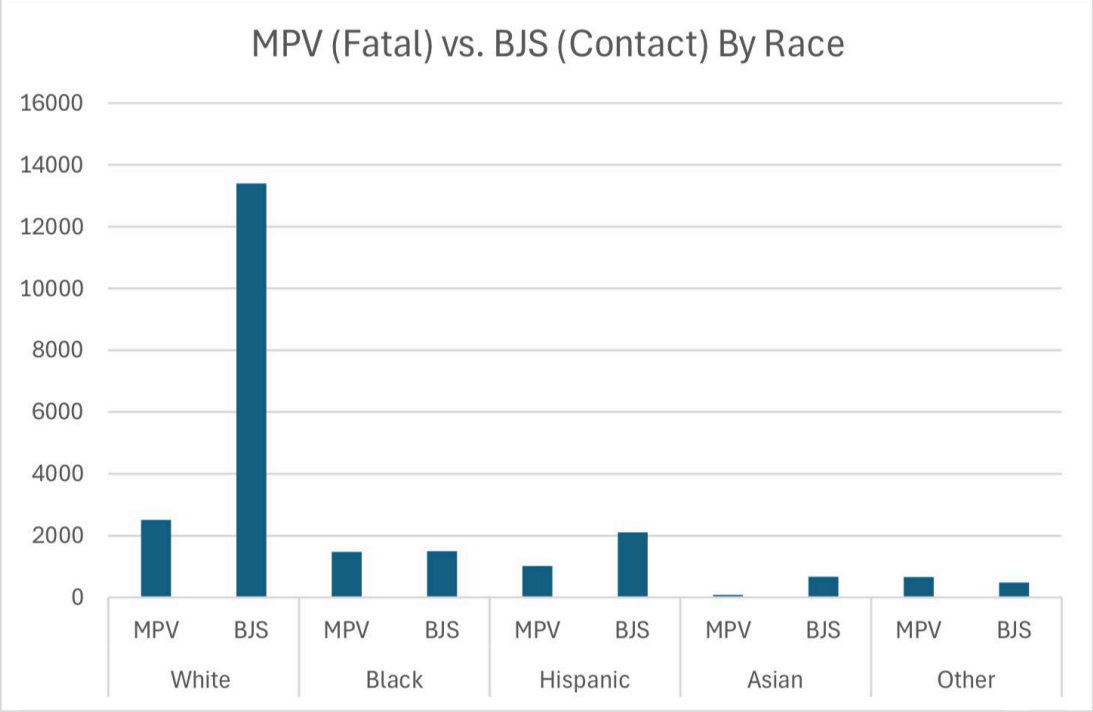


Figure 3: Distribution of Gender in MPV and PPCS by Counts

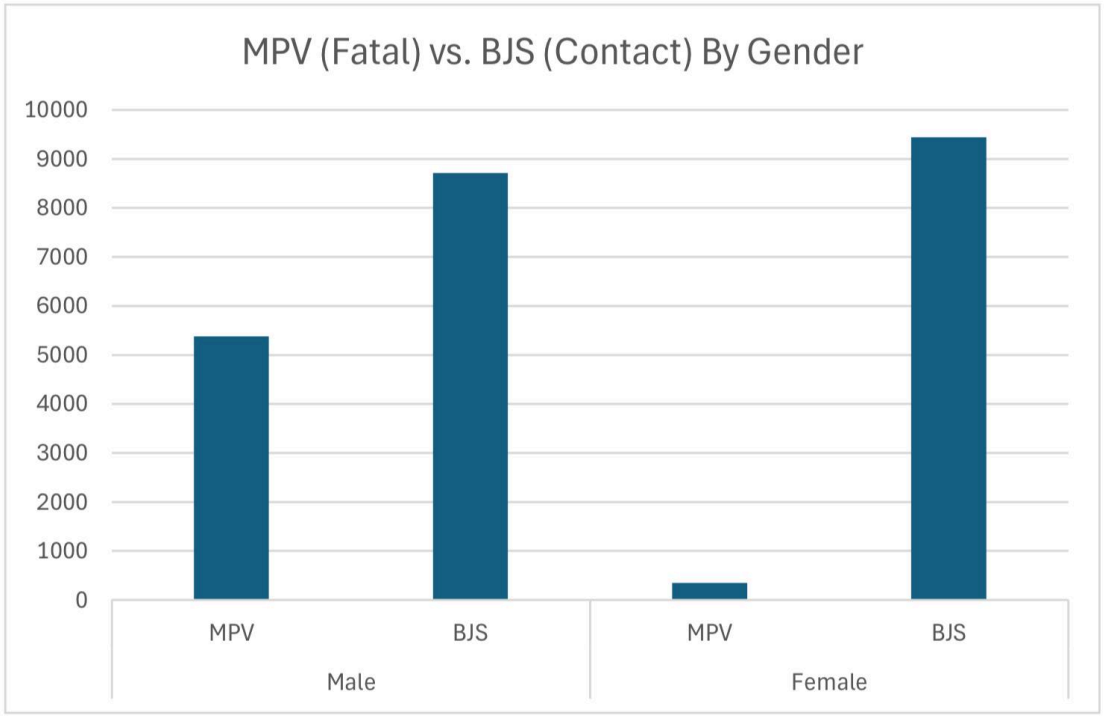


Figure 4: Distribution of Age in MPV and PPCS by Counts

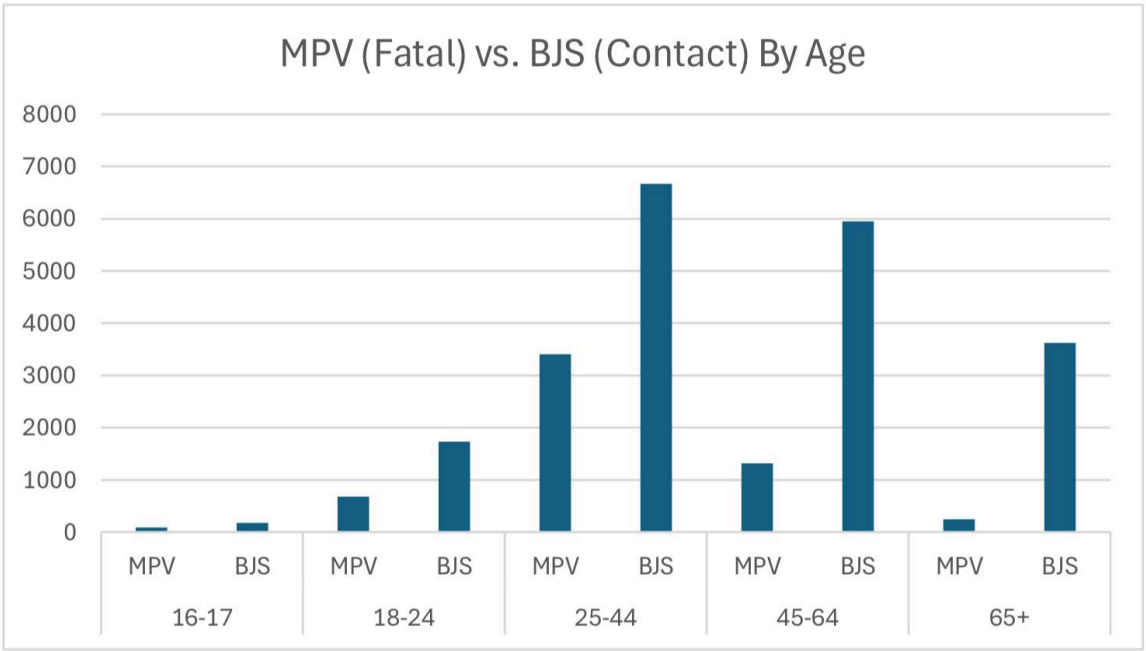


Table 1: Initiation Counts (Fatal vs. Overall Contact)

	Fatal (MPV)	Contact (PPCS)
Officer-Initiated	2041	9276
Call for Service	3691	14,609

As the above table demonstrates, about 35.6% of fatal police encounters were initiated by an officer, while 64.4% were initiated by a call for service. On the other hand, 38.8% of non-fatal encounters were initiated by officers and 61.1% by a call for service. This is about a 3.2% difference between the percentage of fatal and non-fatal encounters initiated by officers, suggesting that encounters initiated by officers were slightly less prone to ending in a fatality.

Table 2: Race Counts (Fatal vs. Overall Contact)

	Fatal (MPV)	Contact (PPCS)
White	2509	13,403
Black	1475	1495
Hispanic	1014	2109
Asian	77	667
Other	657	479

Table 2 indicates significant disparities in the distributions of race within each dataset. About 74% of all non-fatal police encounters involved White people; disproportionately, only 44% of fatal encounters involved a White person. On the other hand, Black people made up only 8% of non-fatal encounters but 26% of fatal encounters. Hispanics made up 12% of non-fatal encounters and 18% of fatal encounters, while Asians made up only 4% of non-fatal and 1% of fatal encounters. People of other racial groups made up 2% of non-fatal encounters and 11% of non-fatal encounters. This suggests that race played a role in whether an encounter ended in fatality, with encounters with White and Asian people less likely to end in a fatality, and Black, Hispanic, and Other groups more likely to end in a fatality.

Table 3; Gender Counts (Fatal vs. Overall Contact)

	Fatal (MPV)	Contact (PPCS)
Male	5381	14,094
Female	351	9791

Table 4: Age Counts (Fatal vs. Overall Contact)

	Fatal (MPV)	Contact (PPCS)
16-17	89	266
18-24	678	2409
25-44	3408	10,077
45-64	1314	7266
65+	243	3867

Tables 3 & 4 demonstrate that a person's age and gender play a role in the responses of police as well. The data indicates that about Males make up 94% of fatal encounters, while Females make up only 6% of fatal encounters. On the other hand, Males make up 59% of non-fatal encounters, while Females make up 41%.

In terms of age, the group most likely to experience a fatality was the 25-44 range. They made up 59% of fatalities and 42% of non-fatal encounters. Those 16-17 made up 1.6% of fatalities and 1% of non-fatal encounters; those 18-24 made up 12% of fatalities and 10% of non-fatal encounters; ages 45-65 comprised 23% of fatalities and 30% of non-fatal encounters; and those aged 65 or older were 4% of fatalities and 16% of encounters, making them the group least at risk of a fatality.

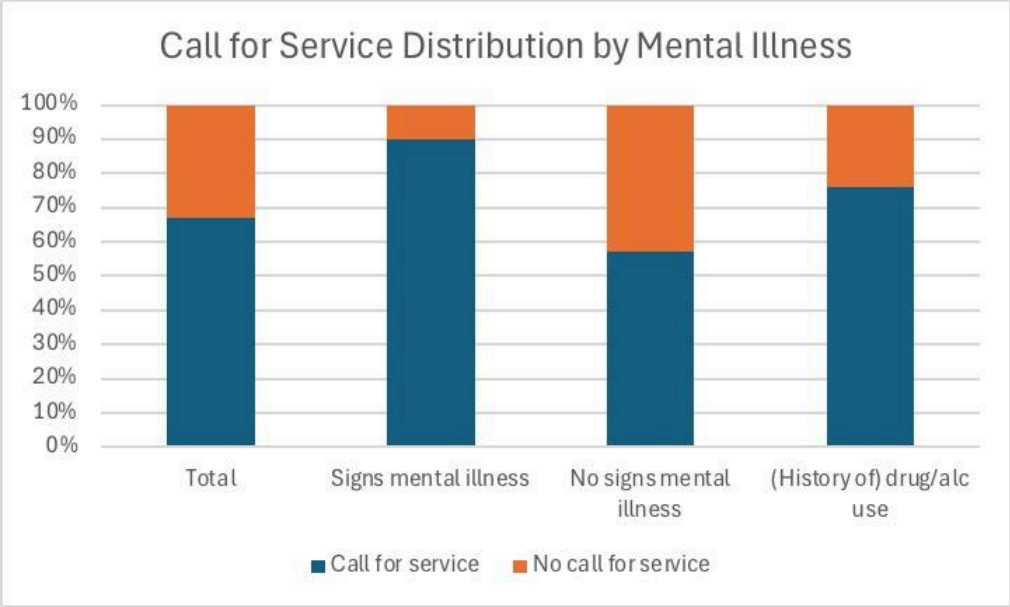
Taken together, this data illuminates potential biases within police practices, including different proportions of violence based on the initiation type. It is essential to examine why these disparities are so noticeable, and why they vary within race, gender, and age. Certain communities may be more likely to experience police encounters initiated by officers because of racial or other biases. The data implies that management of different groups of people may change based on these factors.

Table 5: Call for Service Distribution by Mental Illness in MPV

	Total	Mental Illness	No Mental Illness	Drug/Alcohol Use
Call for Service	7398 (67%)	2462 (90%)	4418 (57%)	518 (76%)

No Call for Service	3764 (33%)	271 (10%)	3330 (43%)	163 (24%)
Unavailable	724	80	606	38

Figure 5: Distribution of Mental Illness in MPV



Caption: visual representation of data in table above

We also analyzed some of the variables that were included in the MPV dataset but not in the PPCS. For example, "signs of mental health issues" was of interest because the distribution varied significantly based on initiation, even though there was no data to compare against in the PPCS.

The table above shows the number of encounters initiated by calls for service versus officers, categorized by whether the individuals involved had signs of mental health conditions or drug/alcohol use. In MPV, 2,733 people showed signs of mental illness, 7,748 people showed no signs of mental illness, and 681 people showed signs of drug/alcohol use. Our data shows that 2,462 incidents involving individuals with a reported mental illness resulted from a call for service—accounting for 90% of the total incidents involving individuals with mental illness. In contrast, only 57% of individuals without mental illness had calls for service.

Conversely, among individuals with no call for service recorded, only 271 had a mental illness, compared to 3,330 without. This stark contrast shows that individuals experiencing mental

illness are significantly more likely to be killed during police incidents that were initiated by calls for service, rather than officer-initiated encounters.

Although similar mental health data is not available in the Bureau of Justice Statistics Police-Public Contact Survey (PPCS), the magnitude of this disparity within the MPV dataset merited further investigation within the literature. A separate study by the NIH found that out of 428 mental health-related calls, approximately two-thirds were dispatch-initiated.[23] The disproportionate representation of mentally-ill individuals in fatal call-for-service incidents reflects a broader trend in how the issues in mental health crises management are routed in the responses of law enforcement, highlighting the importance of examining how policing interacts with mental health.

Regression Analysis

Figure 1: Basic model (Initiation only)

```
Call:
svyglm(formula = dataset == "killings" ~ initiation, design = design,
    family = quasibinomial())

Survey design:
svydesign(ids = ~1, weights = ~weights, data = combined_df)

Coefficients:
                  Estimate Std. Error  t value Pr(>|t|)
(Intercept)       -8.94462    0.01994 -448.547  < 2e-16 ***
initiationofficer -0.26373    0.03293   -8.008 1.22e-15 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for quasibinomial family taken to be 1.000042)

Number of Fisher Scoring iterations: 11
```

Figure 2: Interaction Model (Initiation * Race)

```
svyglm(formula = dataset == "killings" ~ initiation * race, design = design,
    family = quasibinomial())

Survey design:
svydesign(ids = ~1, weights = ~weights, data = combined_df)

Coefficients:
                                Estimate Std. Error  t value Pr(>|t|)
(Intercept)                     -9.35721    0.02763 -338.669  < 2e-16 ***
initiationofficer               -0.33086    0.04742   -6.978 3.08e-12 ***
raceBlack                        1.29672    0.05993   21.639  < 2e-16 ***
raceHispanic                     0.65963    0.05796   11.382  < 2e-16 ***
raceAsian                       -0.79291    0.15182   -5.223 1.78e-07 ***
raceOther                        1.79289    0.08800   20.374  < 2e-16 ***
initiationofficer:raceBlack      0.19663    0.09338    2.106   0.0352 *
initiationofficer:raceHispanic -0.13938    0.09531   -1.462   0.1437
initiationofficer:raceAsian      0.19604    0.26371    0.743   0.4573
initiationofficer:raceOther     -0.11628    0.14549   -0.799   0.4241
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for quasibinomial family taken to be 1.000042)

Number of Fisher Scoring iterations: 12
```

[23] Watson et al., 2021

Figure 3: Full model (Initiation*Race, Gender, Age)

```
svyglm(formula = dataset == "killings" ~ initiation * race +
    age + gender, design = design, family = quasibinomial())

Survey design:
svydesign(ids = ~1, weights = ~weights, data = combined_df)

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                  -8.82325    0.17438 -50.597  < 2e-16 ***
initiationofficer            -0.52346    0.05397  -9.699  < 2e-16 ***
raceBlack                     1.31649    0.08350  15.767  < 2e-16 ***
raceHispanic                  0.43613    0.07091   6.151 7.84e-10 ***
raceAsian                    -1.09044    0.16108  -6.770 1.32e-11 ***
raceOther                     1.85193    0.11980  15.458  < 2e-16 ***
age18-24                      0.02240    0.18325   0.122 0.902723
age25-44                      0.66178    0.17401   3.803 0.000143 ***
age45-64                     -0.02483    0.17631  -0.141 0.887984
age65 or older               -0.98765    0.18849  -5.240 1.62e-07 ***
genderFemale                 -2.82635    0.06242 -45.277  < 2e-16 ***
initiationofficer:raceBlack   0.11606    0.12074   0.961 0.336418
initiationofficer:raceHispanic -0.05496    0.11105  -0.495 0.620662
initiationofficer:raceAsian   0.28234    0.27515   1.026 0.304842
initiationofficer:raceOther  -0.11434    0.18223  -0.627 0.530358
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for quasibinomial family taken to be 1.205183)

Number of Fisher Scoring iterations: 13
```

We ran three logistic regression models using R. The first was a basic model analyzing only the correlation between officer initiation and killings (Figure 1). The second was an interaction model analyzing if the effect of officer initiation varies across different racial groups (Figure 2). The third was a full model analyzing the interaction between initiation and race while factoring in the other variables of age and gender (Figure 3).

Basic Model

The basic model demonstrated a significant correlation between officer initiation and killings. The “initiationofficer” variable had an extremely low p-value (1.22e-15), indicating that officer initiation had a statistically significant correlation with police killings. The coefficient for the initiationofficer variable was -0.26373, which corresponds to an approximately 23% decrease in the likelihood of a fatality when the encounter is initiated by an officer.

Interaction Model

The initiationofficer variable had a p-value of 3.08e-12 and a coefficient of -0.33086, corroborating the basic model in finding that encounters initiated by officers are significantly (28%) less likely to result in a killing, holding other factors constant.

Each of the race variables were also statistically significant. The large positive coefficient of 1.29672 for raceBlack and 1.79289 for raceOther demonstrates that Black and Other racial groups

are more likely to be killed by police than the baseline group, White individuals. Black individuals are 3.66 times more likely to be killed in police encounters, and Other racial groups are 6 times more likely to be killed in police encounters. The variable raceHispanic also had a positive coefficient of 0.69663, which demonstrates that Hispanic individuals are 2 times more likely to be killed by police than White people. The negative coefficient of -0.79291 for raceAsian demonstrates that Asian individuals are 55% less likely to be killed by police compared to White individuals.

Only the initiationoffcer:raceBlack term was statistically significant at the 0.05 level with a p-value of 0.0352. The positive coefficient of 0.19663 demonstrates that when officers initiate encounters involving Black individuals, Black individuals are 22% more likely to be killed than White individuals. Other interaction terms (for Hispanic, Asian, and Other) were not statistically significant, suggesting that the effect of race on likelihood of a fatality did not vary based on how an incident was initiated for these groups.

Full Model

The full model produced similar results for initiation and race, differing only slightly in degree. Officer-initiated encounters are associated with a 41% lower likelihood of resulting in a killing, all else equal. Black, Hispanic, and Other-race individuals were associated with higher odds of being killed in police encounters, even after controlling for age and gender. Asian individuals are significantly less likely than White individuals to be killed by police.

For the age variable, only the 25-44 and and 65 or older age groups were statistically significant. Individuals aged 25-44 are 87% more likely to be killed by police than the reference group, those under 18. Conversely, individuals aged 65+ are 63% less likely to be killed by police than the reference group.

The gender variable is also statistically significant, with females 94% less likely to be killed by police than males. However, this statistic might be slightly exaggerated due to the relatively low sample size of females, particularly in the MPV dataset.

The most interesting part of this model was the fact that all of the initiation variables were non-significant. Unlike in the earlier model, once age and gender are included, the modifying effect of officer initiation on racial disparities is not statistically significant. This suggests that some of the interaction observed before may have been confounded by age or gender distributions across groups.

Discussion of Results

Our analysis reveals substantial disparities in outcomes across different. While preliminary data did not seem to indicate a significant difference between officer-initiated and 911-initiated outcomes, our regression analysis suggests that officer initiation leads to a reduction in violent outcomes. This is likely an effect of the large sample size and controlling for other variables.

Out of our other variables, racial disparities were particularly striking. Black individuals experienced violence at a rate over 3.5 times higher than White individuals. Hispanic and "Other" racial groups also experienced disproportionately high rates of violence. The magnitude of the coefficient for Other racial groups may be due to how each dataset collected their information—since MPV uses public media sources, they are not always able to determine the victim's race, leading to a higher share of people categorized as "Other."

In contrast, Asian individuals had the lowest share of violent police encounters and a similarly small share of non-fatal encounters. Regression analyses confirmed this disparity, indicating that racial bias likely plays a significant role in whether outcomes are violent. This motivated a deeper examination of race in this study. While initiation had a significant interaction with race (specifically for Black people) in the interaction model, this relationship went away when we controlled for other factors. This indicates that the effect of race on likelihood of a fatality did not vary much depending on initiation, potentially suggesting that these effects play a role after an encounter has been initiated. This is an important result for policy interventions, as it suggests that they should target officer behavior during the encounter itself.

Additional disparities emerged within gender and age. Females, and younger and older age ranges were less likely to be involved in a fatal police encounter. These patterns not only indicate disparities in how different communities experience police encounters, but also raise questions about how factors like race, gender, and mental health status affect the likelihood of violence during police interactions.

VII. Limitations

One of the main limitations of the data is our use of the call for service variable as a proxy for initiation. Because neither dataset specifically included this dichotomy in their variables, we could not measure the exact effect of initiation on outcomes of police encounters. While we manually determined that the MPV dataset's call for service variable mapped to initiation at about 92% accuracy, the remaining 8% of incorrectly coded cases could have a significant impact on the results. The same is true for the PPCS, although we were not able to determine how many of those cases were accurately coded. Many of the incorrectly coded cases were situations where a citizen approached a police officer in person – this was coded as a call for service, even though it is not a 911 call. Thus, the results of our data analysis demonstrate the differences between officer-initiated and the broader category of citizen-initiated encounters, rather than focusing on 911-initiated ones. It is unclear how encounters initiated by citizens in person differ from 911 calls, and whether this would significantly impact the results of the regression analysis.

Another limitation was a lack of information or limited access to potential confounding factors. For example, although mental health was a potentially interesting variable since initiation varied greatly based on signs of mental illness in the MPV dataset, as the PPCS did not ask this

question, we were unable to include it in our analysis. Similarly, we could not separate cases by incident type, which is likely to affect the probability of a fatality, as well as often being correlated with initiation type. For example, traffic stops are almost always officer-initiated, and they are less likely to end in violence than domestic violence calls, which are usually 911-initiated. In this case, the initiation would simply be mediating the effect of incident type on fatality. Moreover, this analysis does not account for other potentially crucial factors like police trust or police presence. Some of these factors are also not easily measurable or quantifiable. This could have affected the results of our regression analysis, potentially leading to a different relationship between initiation and outcome.

Furthermore, we used a logistic regression – while this model seemed appropriate given the nature of the response variable, it is possible that the true relationship between initiation and violence is not best described by it. While our logistic regression model provides valuable insight into the probability that a police encounter results in death, it may not fully capture more complex or non-linear relationships between variables. Consequently, a more sophisticated or alternative method of analysis may be necessary to better capture these effects. Furthermore, the regression does not represent a causal model, and our results cannot be interpreted as the true causal effect of initiation on the outcome of police encounters.

In the future, it would be beneficial to broaden the scope of the data, both by including other factors and increasing the granularity of existing variables. Moreover, ensuring that initiation accurately reflects 911 versus officer-initiated incidents, rather than the call for service proxy that was used in this study, will also help to better define this relationship.

VIII. Policy Recommendations

Introduction

To inform our policy recommendations, we examined three cities and relevant programs they have implemented to mitigate the risk of police violence as it pertains to incident initiation. To that effect, the following case studies were conducted: Albuquerque for their Community Safety program (ACS), Chicago's Crisis Assistance Response & Engagement Program (CARE), and New Orleans Police Department's Bias-Free Policing Program. We chose to do a case study of Alberque and Chicago since they both have adopted community led responses to mental health issues. We chose to do a case study of New Orleans since the Department of Justice began to investigate its use of force due to alleged civil rights violations that was based on evidence that Black people experience significantly higher use of force than their white counterparts. In response to the investigation, it created a consent decree with the federal government, which is a court-ordered agreement between the city and the U.S. Department of Justice (DOJ) with provisions to change police policies in an effort to reduce racial disparities in policing. These three policies have been highly beneficial in their respective cities, and accordingly, this paper will demonstrate their advantages and applicability to Chicago. The Justice Department has found that since the entry of

the consent decree, the frequency with which force is used by the New Orleans police department has declined, and its serious use of force has declined by 47% from 2015 to 2023[24]. The first two programs have to do with the relationship between mental health and police interaction, while the latter focuses largely on race.

Reducing Use of Force Through Alternative Crisis Response Models

Chicago implemented the Crisis Assistance Response & Engagement Program (CARE) in 2021 with the goal of expanding the City's current strategies for responding to individuals in crisis to include compassionate care from trained mental health professionals. The CARE program brings a team of professionals who respond together to 911 calls that describe a mental health crisis in certain neighborhoods of Chicago[25]. It began as a partnership between the Chicago Mayor's office, the Chicago Police Department (CPD), the Office of Emergency Management and Communications (OEMC), the Chicago Fire Department, and the Chicago Department of Public Health (CDPH). All CPD officers participating in the program were given Crisis Intervention Training through the National Alliance on Mental Illness. Chicago. Typically this training is not mandatory, so only about 34% had done the program as of 2023, but the CARE program made all the CPD officers go through the training coupled with mental health professionals now being deployed. The CARE program response team consists of a CARE team travelling to the location of an individual facing a crisis. At the scene, their services may include de-escalation, an assessment of the person's mental health, community service referrals, and conveyance to a community-based resource[26]. The CARE pilot program ran from September 2021 to October 2023 and responded to 1348 separate incidents and served 673 people[27]. Less than .1% of calls necessitated the use of force, and fewer than 1% of calls led to an arrest[28]. Of around 800 calls where the individual was successfully located, 475 were given a mental health assessment. Participants in the CARE program self-reported a Subjective Units of Distress Scale (SUD) score, which on average decreased by 19% following an encounter with a CARE team[29].

Concerns regarding the CARE pilot included calls not being answered by the program, unnecessary police presence, the program's inability to replace shut-down mental health clinics, and a lack of exposure to CARE in the neighborhoods the program served. Because CARE worked in such limited hours, many calls in the evenings were not answered, limiting the number of individuals the program was able to help. Additionally, many calls were initially not forwarded to CARE due to an issue complicating a mental health crisis, for example an individual going through a mental health crisis while trespassing. Leadership decided to change the guidelines and include those cases so that these people could still receive help. The program was also criticized for being too police-centric;

[24] U.S. Department of Justice, 2024
[25] Chicago Department of Public Health, 2025
[26] Chicago Department of Public Health, 2025
[27] University of Chicago Health Lab, 2024
[28] Civic Consulting Alliance, 2024
[29] University of Chicago Health Lab, 2024

because nearly no calls led to the use of force or an arrest taking place, critics suggested that the use of police was unnecessary and a purely political choice.

Since the pilot ended, two significant changes have been made to the CARE. Firstly, the mental health responder program expanded to many new neighborhoods, with the stated goal of expanding the program to the whole city of Chicago. Secondly, the program has now been placed solely under the jurisdiction of the Chicago Department of Health. CARE is now staffed only by health department employees. Each response team is made up of behavioral health clinicians and emergency medical technicians. The exclusion of police aids to decriminalize mental health crises and to focus the program on treatment[30]. These changes address many of the critiques on CARE, especially complaints regarding police involvement.

In practice, the CARE pilot was successful, responding to 1348 calls and working with 673 people. CARE continues to better fit the needs of the places it serves thanks to its iterative approach and requests for feedback from sources such as Urban Labs[31]. The program has adjusted its functions and expanded in response to data-driven feedback. Despite originally serving only a few neighborhoods that had the greatest need, the program has managed to scale its services and expand to many new areas[32]. CARE should only become more effective as awareness of the program increases. However, the restricted hours of operation limit the help the program provides to those undergoing mental health crises. Additionally, promoting additional resources such as mental health clinics to supplement CARE's efforts could better serve communities in need. In implementing a program such as CARE, a similar focus on scaling services and continuing to create data-backed changes should be kept in mind. The use of police in the initial dispatches, scant community knowledge of the program, and the lack of additional mental health services would all need to be addressed.

While Chicago's CARE program began as a police-adjacent initiative that integrated mental health officials into emergency response teams, Albuquerque's Community Safety Program (ACS) was established from the start as an independent, community-based emergency response department. In the summer of 2020, Albuquerque, New Mexico, adopted a new, comprehensive program to tackle the rise of police incidents in the area with the development of the ACS program. ACS was enacted as a formal subsection of the City of Albuquerque department after a plethora of pleas from community members in efforts to alleviate the overwhelming volume of 911 calls faced by the Albuquerque Police Department. 2020 was a pivotal period for Albuquerque, seeing as the rate of homicides had skyrocketed. Statistics show that "In 2020, the police department made arrests in only around 55% of all homicides"[33]. Coupled with the nationwide publication and outcry from the murder of George Floyd as well as the increase in police brutality against minorities across the country, a dramatic change was greatly needed in places like Albuquerque. At the time, Mayor Tim

[30] DeVore, 2024
[31] University of Chicago Health Lab, 2024
[32] Chicago Department of Public Health, 2025
[33] Friedrich, 2024

Keller, who took office in 2017, put in efforts to revitalize the police department by investing in tools like gunshot detection, cameras, and license plate readers in efforts to make the unsolved cases easier for police officers to tackle. Although the technological improvements were transformative, it was not enough to respond to the needs of the community, so the administration piloted the Albuquerque Community Safety (ACS) program.

Blueprinted in 2020 and launched in 2020, the primary objective of ACS was to "help focus police resources on more serious crimes and reduced the potential for community members' interactions with the police department over nonviolent issues to result in physical harm for either party"[34]. In 2021, the department constructed a Community Engagement Report including surveys with over 2,800 responses and virtual events attended by more than 400 individuals. ACS utilized the results from community members to develop a strategic Organizational Plan to outline ACS's structure, goals, and implementation strategies. This plan was a foundation for the early stages of the program and after various revisions, the plan was solidified and in September 2021, ACS diverted its first 911 call. ACS has multiple divisions of response teams including the following: Behavioral Health Responders (BHRs), Community Responders (CRs), Street Outreach Responders (SORs), Mobile Crisis Team (MCT) Clinicians, and Triage Specialists. ACS also has a Violence Prevention & Intervention Division designed to core of trauma and violence at its foundation in the community. This interdisciplinary outreach program is designed to support individuals and families experiencing adversity such as addiction, domestic violence, gun violence, and youth violence. All divisions of the ACS actively serve not only to prevent conflict within police incidents with trained professionals, but actively combat the psychological trauma of violence that occurs to promote safety and stability within their community.

Since its debut, the ACS has overcome many milestones and received notable accolades. ACS responded to 16,000 calls within its first year, expanded to 24/7 operations in 2023, and diverted 7% of the Albuquerque Police Department's call volume[35]. The outcome and success rate of ACS had gained recognition in other police departments across the country like Cincinnati, Seattle, and Durham. The success of the Albuquerque Community Safety program highlights the power of community-driven initiatives in reshaping public safety, serving as a model for cities nationwide striving for more effective and compassionate crisis response.

In terms of policy design, the vision of the program consisted in achieving "a city in which any person can call for help and get a purposeful, humane, and appropriate response." To understand exactly what that meant, the program's designers met with a variety of stakeholders and specialists such as Community Policing Councils, mental health associations, Homeless Advisory Council, city boards and commissions, etc. In terms of training, responders are instructed to de-escalate any immediate crisis whether it be a mental health issue or a conflict between people. Then, assess what underlying needs are causing the current issue and address those needs that can

[34] Friedrich, 2024
[35] City of Albuquerque, 2025

be solved in the moment. In addition, they also connect neighbors to appropriate community-based care through a referral or by directly transporting them to a provider or shelter. Collaboration with other City departments that could support the situation is also incentivized.

The success of the policy is reflected in the number of calls it has received, and thus the amount of people it has helped. As of June 2024, the initiative has responded to 68000 calls, averaging 3000 calls a month since the beginning of the program. Moreover, another evidence of success is the significant increase in investment and expansion of the department since the beginning of the policy. ACS began with a budget of 2.5 million dollars and with a relevant increase every year, the current budget amounts to 17 million dollars, almost 7 times the initial budget[36]. As for department expansion, the ACS expanded in May 2024, opening a new 10,800 square foot headquarters to adequately supply for the increase in community responders and to serve as a space for community resources and gatherings[37]. Qualitatively, there has been extensive positive feedback by reliable organizations such as the Harvard Business School, The National League of Cities and The Council of State Governments Justice Center. For example, The review made by the Harvard Business School states that "The case highlights Keller's innovative, collaborative, crisis, and ethical leadership in reforming traditional policing, creating new service delivery models. and driving long-term transformation in public safety"[38]. The mayor himself also stated, facing the completion of the new headquarters in May 2024, that it "solidifies Albuquerque Community Safety as the third branch of emergency response"[39].

The successes and challenges of both the CARE and ACS programs illustrate that cities can significantly reduce use-of-force incidents involving individuals in crisis by investing in non-police crisis response teams. In the research, we found that individuals with mental health conditions tend to be more likely to experience incidents involving use of force when it was initiated by 911 call. To decrease the potential for violence in response to 911 initiated calls from individuals with mental health issues, cities should consider implementing alternative response models that prioritize trained civilians intervention over heavy police presence. The Albuquerque Community Safety (ACS) initiative and Chicago's Crisis Assistance Response and Engagement (CARE) programs both have successful frameworks. Research showed that both models deploy mental health professionals, social workers, and paramedics to nonviolent emergency calls, aiming to de-escalate situations without reliance on law enforcement officials. CARE is under the Chicago Department of Public Health, whereas ACS is a subdivision of the Albuquerque Police Department. Both organizations, despite their differences in their respective authoritative sectors, have been able to provide 24/7 assistance which has contributed towards a significant decrease of incidents within their broader communities.

[36] City of Albuquerque, 2025
[37] City of Albuquerque, 2025
[38] Harvard Business School, 2024
[39] City of Albuquerque, 2025

We recommend the following initiatives based on our research:

1. **Separate Initiatives from Police Department**
   One aspect of CARE and ACS that contributed to their success is autonomy—they function as somewhat independent entities, with CARE operating under the health department and ACS under the APD. Their separation from the rest of the police force allows them to work cordially to address mental health crises, minimize police involvement, and increase community engagement. It further allows them to stray away from standardization tactics and work on a case by case basis, which benefits the citizens involved. Similar initiatives should remain separate from police departments with discretion to handle mental health crises appropriately.
2. **Implementation of Specialized Multidisciplinary Departments**
   ACS has been successful in having various departments that target a diverse array of mental health situations or scenarios, which decreases the burden on officers. This also helps them better address the specific needs of the community they serve. An interdisciplinary approach would allow similar initiatives to better target addressing mental health crises, while keeping responses separate from the police force.

Racial Training for Officer-initiated Use of Force

In 2016, the New Orleans Police Department (NOPD) implemented a robust framework to address racial bias in policing, known as the Bias-Free Policing Policy. This came as a result of the 2013 Consent Decree between New Orleans and the Department of Justice which required the department to address long term patterns of unconstitutional police conduct [40]. One aspect of this system is methodological in nature, and was designed for the purpose of statistically identifying racial disparities across a range of police behaviors. These audits evaluate officer conduct in traffic stops, vehicle exits, pat downs, use of force, and response times, among others. For the purposes of this paper, there are three programs which NOPD implemented that have both a positive impact on the community and which can be replicated in Chicago. The first is utilizing NOPD's methodology for bias auditing, which can offer critical insight into whether enforcement practices are being applied equally. Secondly, restructuring response deployment programs to reduce service delays. Finally, using psychological screening tests and recruit training, which explicitly uses various tests to determine whether candidates hold any biases that might influence them on the job.

The Bias-Free Auditing process is a cornerstone of NOPD's approach to institutional transparency and accountability. Using measures such as the Veil of Darkness Test, for example, allows NOPD to assess racial disparities of traffic stops by comparing the racial composition of stopped drivers during daylight compared to nighttime. In the 2022-2023 Bias-Free Policing Annual Report, the NOPD reported generally positive results; using statistical models, their analyses revealed no evidence of racial disparities in the use of force against Black or minority individuals in the recent years assessed, which is particularly notable given the fact that 70% of subjects stopped by

[40] Schwartz, Jahn, and Geller 2023

NOPD officers were Black in this year (which aligns with demographic patterns in New Orleans and the neighborhoods which generate the majority of calls for service). This suggests that NOPD's reforms and officer training programs have produced measurable success in mitigating racially biased enforcement behaviours.

The second policy has to do with New Orleans' response time reforms. In 2022 and 2023, there were immense disparities between response times in predominantly Black neighbourhoods compared to those which are predominantly white. As a result of this statistic, in January of 2024, NOPD added an additional platoon of officers to the 7th District of New Orleans, a majority Black neighborhood. As of May 2024, the percentage of calls that resulted in an office making the scene and not being able to interact with the caller was lower by 8 percentage points. Finally, the psychological evaluations of police officer candidates in New Orleans is extremely strong; evaluated by third parties, candidates face computerized testing prior to a face-to-face interview with the psychologist, who might also speak to private background investigators. These methods assess social biases that predict the candidate's ability to perform their duties acceptably, questioning them on a variety of identity characteristics. Additionally, they are also rated on factors such as respectful communication, sensitivity and concern, and the ability to resolve conflicts through persuasion rather than force. In 2023, 52 out of 143 applicants failed this test, and were therefore not hired[41].

Applying these policies to other police departments would be worthwhile. Firstly, by adopting similar bias-free auditing programs, departments could increase transparency and accountability in their policing, which would help restore public faith in the system. Secondly, NOPD's redistribution of officer resources shows how targeted strategies can reduce service gaps, which could be modelled by other police departments in underserved areas. And finally, their psychological testing model could be implemented—many police departments, like Chicago, have no mention of any psychological screening tests in polices like their Racial Equity Action Plan in 2023[42]. Instead, they have personality assessment tests, and pre-service training which includes bias training. This preventative measure by NOPD offers a front-end filter that targets implicit biases, which could strengthen equitable policing efforts.

Officer-initiated incidents in New Orleans, however, continue to disproportionately affect Black residents, which, when coupled with national evidence suggesting that these encounters are more likely to escalate than citizen-initiated ones, indicates that there is more that remains to be done. While NOPD insists that there are generally positive results, and that the data shows little to no racial disparities, various think tanks disagree with their statistics, claiming that their departmental audits do not count incidents where a use of force is followed by an arrest.[43] As a result, the overall findings of racial disparity might not reflect the whole picture. On the whole, there is something to be learned from NOPD's recent efforts; local governments might consider a preventative front-end

[41] New Orleans Police Department, 2023
[42] Chicago Police Department, 2025
[43] Liu, 2024

filtering mechanism for biases in candidates, rather than relying on bias training later on in a new officer's career. Additionally, new statistical analyses could help hold local police departments accountable, and ensure transparency.

Original research of the MPV database found that officer initiated incidents leads to lower rates of violence, however there is a significant interaction between race and initiation type. Black individuals experienced significantly higher death rates in both types of encounters. These findings suggest that while initiation type matters, racial disparities remain across all forms of police contact. When not controlling for extraneous variables, an interaction effect between race and initiation type emerged. Specifically, being Black significantly increased the risk of death in officer-initiated incidents. Analysis showed that Black people were approximately 2.5 times more likely to die after a 911 call and 3.7 times more likely to die after an officer-initiated stop, compared to white individuals. This points to a compounded risk for Black individuals, particularly in discretionary stops. The New Orleans Police Department (NOPD) has implemented reforms aimed at reducing racially biased policing. While not without limitations, New Orleans offers a valuable case study in how to proactively reduce violence through better screening, accountability, and resource allocation.

We recommend the following actions based on this model:

1. **Adopt Bias Auditing Tools Tailored to Initiation Type**
   NOPD's use of statistical methods—such as the Veil of Darkness test—helps assess racial disparities in discretionary stops (typically officer-initiated). Police departments should adopt similar auditing tools to track use-of-force incidents based on whether the encounter was officer-initiated or 911-initiated. Disaggregating audits by initiation type would allow departments to pinpoint where racial disparities are most severe and adjust policies accordingly.

2. **Implement Front-End Psychological Screening to Prevent Biased Officer-Initiated Responses**
   One of the most promising practices in New Orleans is the use of third-party psychological evaluations that test for implicit racial bias, emotional reactivity, and conflict resolution capacity during the hiring process. In 2023, 52 of 143 applicants failed the evaluation and were not hired. This preventative measure acts as a filter before an officer ever responds to a call or initiates contact—minimizing the risk of racialized escalation in officer-initiated scenarios.

3. **Reallocate Resources to Address Racial Disparities in Response Outcomes**
   In response to disparities in response times between Black and white neighborhoods, NOPD added an additional platoon to the 7th District, leading to an 8-percentage-point improvement in calls resulting in officer-caller contact. Timely, effective response is particularly critical in 911-initiated incidents, where lack of trust or delayed arrivals can cause unnecessary tension. Resource redistribution based on community need can reduce

escalation in both 911 and officer-initiated encounters, especially in underserved areas.

4. **Promote Transparency in Data and Acknowledge Methodological Limitations**
   While NOPD reports generally positive results, critiques from outside organizations suggest that some auditing methods may undercount use-of-force incidents that result in arrest. For reforms to be credible and impactful, departments must commit to full transparency and invite independent review of both methodology and findings. This is especially important when evaluating racial disparities tied to officer-initiated actions, which often lack external witnesses or clear documentation.

These recommendations support a shift toward data-informed, preventative strategies that acknowledge the unique risks posed by officer-initiated encounters. The New Orleans model demonstrates that when reforms are comprehensive—beginning with hiring and extending through auditing and deployment—they can reduce bias, lower violence, and build public trust.

IX. Conclusion

In this paper, we considered the effect of initiation of police encounters on whether they had a violent outcome. The regression analysis suggests that officer-initiated events are negatively correlated with violent outcomes—conversely, citizen-initiated encounters are comparatively correlated with more violent outcomes. This aligns with existing literature on 911-based initiation and suggests that factors like inadequate standardization, racial biases, and priming effects passed on from 911 dispatchers may play a larger role than police discretion. However, this analysis is limited by the availability and granularity of the data, and these results cannot be considered causal as there may be other factors not presented in our analysis, or another variable like incident type could be the true cause of this relationship.

We further analyzed the specific roles of mental health issues and race in affecting outcomes. Although we could not include signs of mental health issues in our regression analysis as it was not included in the Police-Public Contact Survey, we determined in our preliminary review of the data that it was worth examining due to the prevalence of mental health incidents that arose from 911 calls. From existing literature and case studies, we recommend that policymakers implement programs specifically targeted at addressing mental health calls, especially aimed at increasing awareness, introducing specialized training, and expanding data collection and use. Moreover, we recommend that police departments ought to have separate, trained teams specializing in dealing with mental health crises and de-escalation tactics.

Our regression analysis of race in police encounters suggests that race does correlate significantly with violence, aligning well with other studies on the subject. However, we did not find that there was a significant interaction between race and initiation type. This suggests that racial biases play a role after an incident is initiated, and so policies should target officer behavior during

interactions. Based on an analysis of the New Orleans Police Department's racial policy reforms, we recommend that other departments implement similar policies such as bias auditing and psychological screenings and address these with targeted training programs and resource reallocation.

Importantly, this research addresses a key gap in examining the role of initiation in leading to violent outcomes in policing. This study emphasizes a need for interventions that address the role that 911 dispatchers and police officers alike have in determining the outcome of an encounter with citizens. Moreover, it is also important to consider how this relationship changes with key factors such as race and mental health. We hope that this research serves as a step into further investigating this relationship, and determining successful methods of intervention. By addressing the root causes of police violence, and working to eliminate them at every step of a police encounter, we can begin to contend with the problem of over-policing in the United States.

X. References

Associated Press. 2023. "Staffing Shortages Leave 911 Call Centers Struggling, Dispatcher Survey Finds." *AP News*, May 11, 2023. https://apnews.com/article/911-operator-staffing-shortage-dispatcher-survey-6dd0085c73bdee66d5a5d2795122cb97

Butler, Elizabeth. "911 Dispatchers: A Critical and Overlooked Part of Policing." Stanford Law School, October 2, 2023. https://law.stanford.edu/2023/10/02/911-dispatchers-a-critical-and-overlooked-part-of-policing/.

County of Sacramento v. Lewis, 523 U.S. 833. Supreme Court of the United States, 1997. https://supreme.justia.com/cases/federal/us/517/806/

Chicago Department of Public Health. 2025. "Crisis Assistance Response & Engagement Program (CARE)." Last modified April 21, 2025. https://www.chicago.gov/city/en/depts/cdph/supp_info/behavioral-health/care-home.html.

Chicago Office of Inspector General (OIG). 2015. *911 Calls for CPD Service*. Accessed April 21, 2025. https://igchicago.org/information-portal/data-dashboards/911-calls-for-cpd-service/.

Chicago Police Department. 2015. *Use of Force Dashboard*. Accessed April 21, 2025. https://www.chicagopolice.org/statistics-data/data-dashboards/use-of-force-dashboard/.

Chicago Police Department. 2025. *Chicago Police Department's Racial Equity Action Plan*. Accessed April 21, 2025. https://www.chicagopolice.org/wp-content/uploads/Chicago-Police-Departments-Racial-Equity-Action-Plan.pdf.

City of Albuquerque. 2025. "Department History." *Albuquerque Community Safety*. Accessed April 21, 2025. https://www.cabq.gov/acs/services/history.

Civic Consulting Alliance. 2024. "Doubling the Reach of Chicago's Mental Health Crisis Response Program." *Civic Consulting Alliance*, March 7, 2024. https://www.ccachicago.org/2024/03/07/doubling-the-reach-of-chicagos-mental-health-crisis-response-program/.

DeAngelis, Joseph, Michael Benz, and Cameron Gill. 2019. "How Much Does Officer-Initiated Contact Matter? A Multilevel Analysis of Injury Outcomes in Police–Citizen Encounters." *Injury Prevention*. https://ifp.nyu.edu/2019/journal-article-abstracts/injuryprev-2019-043467v1/

DeVore, Molly. 2024. "City Removing Police and Fire Departments From Mental Health Emergency Response Program." *Block Club Chicago*, September 26, 2024. https://blockclubchicago.org/2024/09/26/city-removing-police-and-fire-departments-from-mental-health-emergency-response-program/.

Friedrich, Michael. 2024. "Albuquerque Shows a Way Forward for Cities Struggling to Solve Homicides." *Arnold Ventures*, July 11, 2024. https://www.arnoldventures.org/stories/albuquerque-shows-a-way-forward-for-cities-struggling-to-solve-homicides.

Fryer, Roland G., Jr. 2016. *An Empirical Analysis of Racial Differences in Police Use of Force. Journal of Political Economy*. Forthcoming. Accessed April 21, 2025. https://fryer.scholars.harvard.edu/publications/empirical-analysis-racial-differences-police-use-force.

Fuller, Doris A., H. Richard Lamb, Michael Biasotti, and John Snook. 2015. *Overlooked in the Undercounted: The Role of Mental Illness in Fatal Law Enforcement Encounters*. Arlington, VA: Treatment Advocacy Center. https://www.tac.org/reports_publications/overlooked-in-the-undercounted-the-role-of-mental-illness-in-fatal-law-enforcement-encounters/.

Gatens, Alysson. 2018. *Responding to Individuals Experiencing Mental Health Crises: Police-Involved Programs*. Chicago, IL: Illinois Criminal Justice Information Authority. https://icjia.illinois.gov/researchhub/articles/responding-to-individuals-experiencing-mental-health-crises-police-involved-programs.

Harvard Business School. 2024. *"In That Crucible, You Find Innovation": Public Safety Transformation in Albuquerque*. Case No. 625026-PDF-ENG. Boston, MA: Harvard Business Publishing. https://hbsp.harvard.edu/product/625026-PDF-ENG.

Hoekstra, Mark, and CarlyWill Sloan. 2022. "Does Race Matter for Police Use of Force? Evidence from 911 Calls." *American Economic Review* 112 (3): 827–60. https://doi.org/10.1257/aer.20201292.

Kramer, Rory, and Brianna Remster. 2018. "Stop, Frisk, and Assault? Racial Disparities in Police Use of Force during Investigatory Stops." *Law & Society Review* 52 (4): 960–93. https://www.jstor.org/stable/45093949.

Levin, Sam. 2024. "US Police Use Force on 300,000 People a Year, with Numbers Rising since George Floyd: 'Relentless Violence.'" *The Guardian*, August 28, 2024. https://www.theguardian.com/us-news/article/2024/aug/28/police-use-of-force-violence-data-analysis

Liu, Michelle. 2024. "New Orleans Police Say Their Use of Force Data Shows No Racial Disparities. We Checked the Numbers." *WWNO*, November 1, 2024. https://www.wwno.org/2024-11-01/new-orleans-police-say-their-use-of-force-data-shows-no-racial-disparities-we-checked-the-numbers.

Mann, Brian. 2024. "More 911 Call Takers Are Being Trained to Handle Mental Health Calls without Police." *NPR*, April 5, 2024. https://www.npr.org/2024/04/05/1242310330/911-call-takers-police-alternative

National Policing Institute. 2020. "Origins of Officer-Involved Shootings: Analysis of Data Reported to Police via 911 Calls Reveal Opportunities to Reduce Violent Outcomes." *National Policing Institute*, November 16, 2020. https://www.policinginstitute.org/onpolicing/origins-of-officer-involved-shootings-analysis-of-data-reported-to-police-via-911-calls-reveal-opportunities-to-reduce-violent-outcomes/

New Orleans Police Department. 2023. *2022–2023 Bias-Free Policing Annual Report*. New Orleans, LA: City of New Orleans. https://nola.gov/nola/media/NOPD/Consent%20Decree/NOPD%20Audits/2022-23-Bias-Free-Policing-Annual-Report.pdf.

Schwartz, Gabriel L., Jaquelyn L. Jahn, and Amanda Geller. 2023. "Policing Sexuality: Sexual Minority Youth, Police Contact, and Health Inequity." *American Journal of Public Health* 113 (Suppl 1): S21–S28. https://doi.org/10.2105/AJPH.2022.307079.

Stanford University. 2015. *The Stanford Open Policing Project*. https://openpolicing.stanford.edu/findings/.

Stanford Law School. "911 Dispatchers: A Critical and Overlooked Part of Policing." *Stanford Law School*. October 2, 2023. https://law.stanford.edu/2023/10/02/911-dispatchers-a-critical-and-overlooked-part-of-policing/.

Terrill, William. 2005. "Police Use of Force: A Transactional Approach." *Justice Quarterly* 22 (1): 107–138. https://doi.org/10.1080/0741882042000333663.

Terrill, William, and Stephen D. Mastrofski. 2002. "Situational and Officer-Based Determinants of Police Coercion." Justice Quarterly 19 (2): 215–48. doi:10.1080/07418820200095221.

University of Chicago Health Lab. 2024. *Crisis Assistance Response and Engagement (CARE) Program Evaluation Report*. Accessed April 21, 2025. https://urbanlabs.uchicago.edu/attachments/f245b687ea00b9e61794dcba5e5937f3451aa6e4/store/8c61d792e209a352a81298a621188987628b280c2d03a600a7efb3c995d9/CARE+Eval+Report+-+FINAL_REL.pdf.

U.S. Department of Justice. 2024. "Justice Department Announces Significant Milestone in Policing Reform Efforts for the City of New Orleans and New Orleans Police Department." *Office of Public Affairs*, September 27, 2024. https://www.justice.gov/archives/opa/pr/justice-department-announces-significant-milestone-policing-reform-efforts-city-new-orleans.

Vera Institute of Justice. n.d. *Understanding Police Enforcement: A 911 Call Analysis*. https://vera-institute.files.svdcdn.com/production/downloads/publications/understanding-police-enforcement-911-analysis-summary.pdf

Watson, Amy C., Michael T. Compton, Janice Thompson, Jeffrey Draine, and Beth Angell. 2021. "The Impact of Crisis Intervention Team Response, Dispatch Coding, and Location on the Outcomes of Police Encounters with Individuals with Mental Illnesses in Chicago." *Policing* 15 (3): 1948–62. https://doi.org/10.1093/police/paab010.

Wood, J., Watson, A., Compton, M., & Watson, D. (2021). *Calls for service: Police responses to behavioral health-related calls for service*. Robina Institute of Criminal Law and Criminal Justice. https://robinainstitute.umn.edu/sites/robinainstitute.umn.edu/files/2022-02/calls_for_service_final_report_5-3-2021_final.pdf