

EXECUTIVE LEVEL JOURNAL

Peer-reviewed articles

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Editor's Note

By Heather R. Cotter, IPSA Executive Director/CEO, Founder and Editor-in-Chief



Thank you for your interest in the **Fifth Edition** of the *IPSA Journal*. This scholarly resource is available to all public safety professionals. The IPSA was fortunate to have several public safety authors and peer reviewers contribute to this executive-level, peer-reviewed publication. The *IPSA*

Journal is an opportunity to publish manuscripts about leadership issues and best practices applicable to all facets of public safety.

The *IPSA Journal* is for the public safety community so they can gain timely access to pertinent information that impacts decision-making, policy, administration, and operations. Our readers represent the entire public safety community: law enforcement, fire service, EMS, 911 telecommunications, public works (water, sanitation, and transportation), public health, hospitals, security, private sector, and emergency management. In this Fifth Edition, readers will see the following peer-reviewed manuscripts:

- 1. The Push of Disasters and Pull of Pandemics: Law Enforcement Officers' Perspectives on Crime and Policing During Disasters and the COVID-19 Pandemic by Daniel Augusto, EdD, Northcentral University; Elizabeth Davenport Pollock, PhD, Northcentral University; and Steven Flick, MS
- 2. Illuminating Firefighter Awareness Within a Dangerous Lived Experience: A Single
 Case Study by Eric J. Russell, Utah Valley College; Rodger E. Broomé, Utah Valley
 College; and Jamie L. Russell, Utah Valley College

- 3. The Nature of Disciplinary Processes in Police Organizations: The Disciplinary

 Continuum by Brad J. Castle, Marion Technical College; Eric J. Russell, Utah Valley

 College; and Rodger E. Broomé, Utah Valley College
- 4. Interest Based Bargaining: A Review of Ohio Fire, Police and Teacher Collective Bargaining Agreements by Gregory L. Walterhouse, Bowling Green State University
 Each paper was researched by the authors, includes a literature review, offers key discussion points and they were all peer-reviewed. The IPSA has a systematic process in place for approval, rejection and resubmissions of manuscripts. The IPSA enlists peer reviewers made up of public safety practitioners and academicians with experience in scholarly writing to review all manuscripts.

It is the IPSA's vision to continually accept manuscripts and to release future editions of the *IPSA Journal*. We seek high-quality manuscripts from all public safety professionals, academia, researchers, and scholars. I encourage you to <u>download and review the IPSA</u>

Manuscript Guidelines, use the *IPSA Journal* Template and submit a manuscript to us for publication consideration. There is so much knowledge to share within and between each public safety discipline.

Stay safe,

Heather R. Cotter



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The Push of Disasters and Pull of Pandemics: Law Enforcement Officers' Perspectives on Crime and Policing During Disasters and the COVID-19 Pandemic

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The Push of Disasters and Pull of Pandemics: Law Enforcement Officers' Perspectives on Crime and Policing During Disasters and the COVID-19 Pandemic

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Abstract

This study used qualitative surveys and a focus group of law enforcement officers (LEO)s in two high disaster areas, Texas, and Florida (n = 56), to explore LEOs experiences related to disaster and the COVID-19 pandemic. Eight themes emerged from the data analysis and the study resulted in three grounded theoretical models supporting the written grounded theory. Themes emerged related to crime and law enforcement during the pandemic, crime and law enforcement during disaster, and Routine Activities (RA) theory. RA theory emerged as the primary theoretical lens that LEOs applied to their observations on crime. Disasters create a type of outward pulling effect where LEOs are more exposed to the public through their response activities. Conversely, the COVID-19 pandemic has created a type of inward pulling effect and challenge LEOs abilities to conduct law enforcement while maintaining social distancing. The study also revealed that, overall, disasters and pandemics are complex, with multiple changes occurring simultaneously. Respondents indicated that looting or burglary, and fraud increase during disasters while the pandemic caused sheltering-in-place, which facilitated increases to domestic violence, as well as a reduction in other crimes due to reduced public activity. Respondents also indicated that the pandemic has altered some police procedures and introduced unfamiliar stressors for LEOs. Police executives might use these findings to inform their decisions relative to agency continuity planning and subsequent training for LEOs. Such formal planning and training are particularly important for agencies that have limited disaster policing experience.

Key Words: Disaster Crime, Pandemic Crime, COVID-19, Routine Activities Theory, Continuity

Introduction

Disasters and pandemics create unique challenges for law enforcement agencies and law enforcement officers (LEOs). Understanding how to operate within the environment created by each type of hazard is paramount for agencies, particularly given the ongoing COVID-19 pandemic and the seemingly constant stream of weather-related disasters striking the U.S. Certainly, many law enforcement agencies will apply their own analysis to crime data related to disasters and pandemics, but thorough qualitative analysis of LEOs perceptions seems unlikely at the agency level due to the necessary time investment and financial investment. Additionally, little academic research exists to uncover and analyze qualitative data on LEO perspectives on disaster operations versus pandemic operations. Continuity planning and related training could help to overcome the lack of experience for departments that have little or no disaster or pandemic experience. Law enforcement agency continuity programs hoping to rely on evidence-based procedures would benefit from supplementing their crime data analysis efforts with enhanced understanding of LEOs perspectives that are crucial to understanding the differences in crime and policing during disasters and pandemics.

Our paper assists in filling these gaps in the practice and the literature. This qualitative grounded theory study is intended as a starting point to better understand the insider perspective of LEOs with disaster and pandemic experience. Our ultimate aim is to provide a grounded theoretical model that uses LEO experiences and perspectives to further the body of work on disaster crime and pandemics and inform management decisions, future research, and policy. Some of our most noteworthy findings from this research are that (1) LEOs consistently used Routine Activities (RA) theory as their lens in their responses, (2) disasters can pull officers

outward toward increased public interaction, and (3) the COVID-19 pandemic's social distancing practices pull officers inward and away from the public.

For the purposes of this study, the term 'pandemic' refers to a global disease outbreak (CDC, 2018). The term 'disaster' generally refers to major events involving multiple casualties, such as earthquakes, major terrorism events, hurricanes, snowstorms, etc. (FEMA, n.d.). Pandemics and disasters are treated as distinct and separate hazards in this paper. We define 'continuity' as efforts to ensure that an agency can continue to perform its essential functions during critical incidents, disasters, pandemics, and other emergencies (FEMA, n.d.). We refer to those incidents generally as 'continuity events.'

Literature Review

Disaster criminology could be described as the study of society's reactions to disaster, particularly related to crime, and it is intended in part to help mitigate the negative impacts of disaster on society (Frailing, Harper, & Serpas, 2015; Prelog, 2016; Frailing & Harper, 2017). Some crime rates have been found to increase during disasters (Leitner & Helbich, 2011; Frailing et al., 2015; Prelog, 2016; Zahnow et al., 2017; Weil et al., 2019). Other researchers found that some crimes tend to decrease during disasters (Herber, 2014; Zahran et al., 2009). Other research also found that crime seems to change location during disasters (Leitner & Helbich, 2011; Zahnow et al., 2017; Breetzke & Andresen, 2018; Breetzke et al., 2018; Spencer, 2017). Prelog (2016) found that increased disaster consequences are related to increased crime rates. The prominence of looting has also been a subject of ongoing academic debate, and the current state of the research reflects that looting is a reality during disasters (Brown, 2012), and that the crime is likely more prevalent in areas that are highly disadvantaged (Frailing & Harper, 2017). Taken together, the research seems to indicate that some crimes increase during disaster

while other crimes decrease (Spencer, 2017), and that disasters have an impact on spatial patterns of crime (Zahnow, et al., 2017). These findings imply that disaster crime is a highly nuanced area of study and that future research should explore what factors impact whether crime increases, decreases, or changes locations during disaster.

However, the study of pandemic crime is much more limited. Little research exists related to crime during pandemics, and our research serves as part of a foundational perspective. Ashby (2020) conducted what appears to be among the first quantitative research efforts related to crime and the pandemic and found that the pandemic has not been associated with significant increases to crime rates in the U.S. on a broader level, but decreases were identified in residential burglaries and motor vehicle theft in some areas. Non-academic sources have also added some information, reporting that interpersonal violence has increased during the pandemic (Tolan, 2020; Taub, 2020). In any case, further empirical research will shed light on any changes to crime as the pandemic continues to unfold. In addition, although the news media has reported that police practices are changing due to the COVID-19 pandemic (Elinson & Chapman, 2020), to the authors' knowledge this article is the first peer-reviewed academic research to explore LEOs perspectives on policing and crime during the pandemic or provide any comparison of pandemic policing to disaster policing.

Although a growing body of work explores the available data related to disaster crime patterns and crime during the pandemic, little if any research applies the lens of what is likely the most viable source of context: LEOs who observe and respond to disaster crime and conduct enforcement during the COVID-19 pandemic. The foundation of any understanding of disaster crime or pandemic crime should be built upon an understanding of the experiences of LEOs who observe the phenomena daily, and can provide the context to inform future studies.

Theoretical Framework

RA theory was used as the primary framework to inform the study because of its past use in explaining disaster crime (Prelog, 2016; Frailing & Harper, 2017). Briefly, RA theory posits that motivated offenders commit crimes based upon location of a suitable target and absence of a capable guardian (Cohen & Felson, 1979). Some researchers have argued that disasters might alter one or more of the three occurrences said to be necessary under RA theory, for a crime to occur: (1) attractive target, (2) motivated offender, and (3) the absence of a capable guardian (Prelog, 2016; Frailing & Harper, 2017). Although the tenets of RA theory were not specifically used to shape the goals of the study, we were attentive to the potential, based on past research, that disaster alters one or more RA theory components. The next section is a summary of the research method and data analysis process, which are necessarily intertwined as a result of the grounded theory process.

Research Method

Qualitative research is suitable for gathering rich, detailed information that typically cannot be accessed by quantitative research (Creswell, 2014). This study used qualitative surveys (n = 56) and a focus group to develop a grounded theory related to the impact of disaster and the COVID-19 pandemic on crime. The findings presented herein are a portion of the results of a larger study related to LEOs experiences in disaster. The central or overarching research questions for this study are intentionally broad as is typical of qualitative research (Maxwell, 2005; Creswell, 2009).

- Research Question 1 How does crime change surrounding disasters, if at all?
- Research Question 2 How has crime changed surrounding the COVID-19 pandemic, if at all?

As is often the case with grounded theory, the findings from the research questions are intended to provide a new perspective on a topic and fill a gap in the current literature (Creswell, 2007). Grounded theory is also used to reveal a process on which little is known (Charmaz, 2010), and it can incorporate the use of rich data while incorporating a systematic and structured process. In this case, grounded theory aids in the development of some visual models to answer the research questions above.

The use of online qualitative surveys allowed for the best mixture of detailed responses while prioritizing ease and convenience for interviewees that would result in the highest possible number of detailed responses. We found that using an online survey with open-ended questions was the best way to limit the time commitment from LEOs while meeting COVID-19 pandemic social distancing requirements. The use of a qualitative survey tool also allowed for the collection of more information than a quantitative survey tool would provide, all at a time when respondents would have fresh memories of recent disasters and the current pandemic. Qualitative surveys are unique since, unlike quantitative surveys that capture frequencies of responses, qualitative surveys collect the diversity or breadth of responses relative to a topic (Jansen, 2010). Qualitative surveys have been utilized in general social science research (Jansen, 2010) and more recently in public safety research (Moore et al., 2019). The survey tool was developed using a viability review process with feedback from two uninvolved LEOs and the three-person research team. The viability review process was similar to a pilot test to determine if the survey questions were useful, were clearly communicated, and provided opportunities for respondents to fully articulate their experiences relative to the research questions.

Data were gathered from 56 state, federal, and local LEOs primarily around Houston,
Texas and Florida, selected due to their experience with disaster law enforcement and the

COVID-19 pandemic. Participants were included in the study if they were an active LEO working in a law enforcement role during a disaster and the COVID-19 pandemic in Florida or Texas. Respondents were made up of line-level LEOs and supervisors with patrol and investigative experience at the local, state, and federal levels, including the military. All of the respondents had pandemic experience as well as disaster law enforcement experience in earthquakes, weather-related disasters, terrorism, or several other types of disasters and major crisis events. Respondents were provided a summary of the aims of the study and provided informed consent.

Sampling

The data collection began with purposeful sampling, which involves an intentional selection of the most relevant subjects, based upon the parameters of the study (Chun et al., 2019). As the surveys progressed, the researchers began coding data and using theoretical sampling to identify subsequent respondents. These two sampling methods are standard in qualitative research (Creswell, 2007), and are often not expected to be generalized directly to the entirety of the broader population. They do, however, serve as a sturdy foundation for future study and reasonable evidence for inclusion into the current state of understanding.

LEOs were primarily sought from the Houston, Texas area and Florida because of the increased likelihood of their experience with recent disasters such as hurricanes Ike, Harvey, Imelda, Barry, and Dorian, and their experience with the COVID-19 pandemic. The 26-question anonymous survey was administered during April, May, and June 2020. The questions allowed for open-ended responses and explored respondents' perspectives and experiences related to disaster crime and their experiences in law enforcement during disasters. Respondents were also asked how their experiences with disaster crime compare to their experiences with crime during

the COVID-19 pandemic. Survey data were exported to Microsoft Excel and NVivo Qualitative Data Analysis Software for analysis and coding. The coding process began soon after the first survey responses were received.

Theoretical sampling then began, and additional surveys were sent to more LEOs who could enhance the diversity of responses. Respondents were asked to provide the survey link to additional LEO acquaintances with disaster and pandemic law enforcement experience. Respondents' experience level ranged from more than 20-years of law enforcement to less than five-years of law enforcement. All respondents also had disaster law enforcement experience and pandemic law enforcement experience. However, since qualitative surveys are designed to identify the diversity of potential responses instead of frequency of responses (Jansen, 2010), this paper does not emphasize how the responses are grouped by experience level, age, or demographics of respondents.

The theoretical sampling was also used to identify categories from the data until the categories fully reflected the responses (Charmaz, 2010). Survey questions were intentionally broad to allow for diverse interpretations. The questions focused on LEO challenges, discretion, resources needed, changes to crime, and general experiences during disasters and the current pandemic. RA theory components were intentionally avoided in the survey questions to avoid influencing responses. However, this study is limited primarily to findings related to crime during disasters and the COVID-19 pandemic. Due to the volume of results from the larger study, detailed findings on LEO challenges, discretion, resources needed, and general experiences during disaster are reserved for what we hope will be another article. The surveys and coding process allowed researchers to identify concepts embedded in the responses (Glaser, 2001).

Data Analysis and Coding Process

Glesne (2016) described open coding as a process wherein the researcher allows codes to be revealed by the data. Grounded theory includes repeated comparison and conceptualization through the evaluation of the text, and generation of coding categories (Glaser, 1998). We used open coding initially in order to allow for unforeseen codes to emerge. We then used theoretical coding, where the researcher uses previously established codes (Creswell, 2014) once initial codes were created. More than 200 major and minor codes were identified from the 65 pages of qualitative data collected.

During open coding, as surveys were completed, constant comparisons of new and existing data were used to identify codes. Identification of themes occurred through specific types of coding within multiple coding cycles. Categories were created from numerous codes that are similar to one another (Glaser, 2001). Subcategories were also aligned under the larger categories (otherwise known as parent-child codes). Second cycle coding continued to refine and reorganize categories and subcategories (Glaser & Strauss, 1967; Strauss & Corbin, 1998), and comparison of categories and associated subcategories through axial coding was also completed during this cycle. Next, categories were merged into new concepts, which yielded additional categories. Researcher memos also aided in data conceptualization, category development, and identifying connections between categories. Thematic networks were identified wherein themes appear to relate to one another (Attride-Stirling, 2001). The final sorting of memos connected the identified categories and was the final stage in creating the thematic networks that provide the framework for the completed grounded theory.

Surveys were discontinued upon saturation, which is when continued data gathering reveals no additional properties of a category (Glaser & Strauss, 1967). Finally, a focus group

was formed using a website developed by the researchers, which allowed users to provide anonymous online feedback relative to the models. The focus group provided opportunities for feedback on the models and assisted us in refining the theory and associated visual models.

Validity

Maxwell (2005) described two primary threats to validity in qualitative research: researcher bias and reactivity. Researcher bias involves subjectivity on the part of the researchers. Bias is likely present, but the purposeful use of a diverse research team with practical law enforcement experience, resiliency experience, and academic experience was designed to reduce any negative implications. Paterson (1994) described reactivity as the unavoidable effect of the researcher on the group or person being studied. Implications of researcher bias were minimized by creating open-ended and objective questions free from any tone or expected responses. Reactivity was also minimized through anonymity and the asynchronous data collection process. We also deliberately included researchers with varied backgrounds to apply outsider perspective and objectivity to the entire process. Credibility is the confidence one can have in the truth of the findings (Bowen, 2005). We searched for discrepant evidence or negative cases and sought investigator triangulation and theory triangulation (Carter et al., 2014) to maximize credibility. The use of a focus group to review and comment on visual models also added credibility to the models created. Overall, this grounded theory research used deliberate sampling methods, systematic coding and data analysis, and measures to increase validity and credibility in order to gather important data at a time when respondents are most likely to remember important experiences.

Results

Readers with quantitative research experience are asked to remember that, when reviewing qualitative findings, a qualitative approach seeks to describe a process, instead of measuring the process, which is common in quantitative approaches (Patton, 2015). Generating numbers or percentages is not the purpose of qualitative inquiry. The aim of qualitative analysis is not to determine how many respondents said something, but rather, the focus is to generate substantive insight into the phenomenon being studied (Patton, 2015).

Likewise, unlike quantitative surveys that seek to measure the frequency of a response, qualitative survey tools are intended to identify the breadth or diversity of potential responses and provide a rich picture of a phenomenon (Jansen, 2010). As a result, the findings listed below will not focus on specific percentages of respondents who reflected a particular viewpoint, since doing so would provide little added insight, given the sampling strategy chosen. Qualitative researchers also avoid reporting that "all respondents" or "no respondents" responded in a certain way as that would potentially break the confidentiality pledge due to the sampling design.

Additionally, focusing on frequency of response would have extremely limited utility since the responses are not intended to be generalized to the entire population, unlike quantitative research. Instead, we focus on providing the most salient comments that were reflective of the data, and provide the richest possible insight into the phenomenon, which quantitative research cannot provide.

Overall, qualitative analysis of the surveys revealed eight themes relative to LEOs' experiences regarding crime during disasters and pandemics. LEOs also reported changes unique to the COVID-19 pandemic. The themes identified below emerged from the qualitative analysis. Each of the themes below was endorsed by all members of the focus group.

Disaster Theme #1: Certain Types of Crimes Increase as the Disaster Progresses.

Most respondents indicated that certain types of crime increase as the disaster progresses.

Respondents consistently indicated that looting and property crime were common before and during disasters:

- *Looting and theft increase* (LEO 8).
- A great example is looting during hurricanes or other disasters (LEO 11).
- During times of natural disasters, like hurricanes, residents abandon their homes so looting becomes a problem (LEO 6).

Of the respondents, several investigators also observed increased opportunities for disaster fraud because of the increase in government funding for disaster relief. FEMA funding and USDA disaster food stamp benefits create more opportunities to collect benefits through fraudulent means. When asked what comes to mind with disaster crime, several investigators responded indicating that disaster-related fraud increases:

- Fraud against disaster subsidy programs, price gouging, and looting (LEO 1).
- False statements to obtain state or federal funds to which they are not entitled (LEO 9).
- Fraud. Individuals exploiting minimal oversight of government relief funds (LEO 13). Investigators also identified increased opportunities for scams against disaster victims who are overwhelmed and traumatized by the disaster.
 - Many seek to gain from others' losses during disasters. I also think about price gouging (LEO 2).

Some LEOs identified that a shelter in place order was associated with an increase in domestic violence and abuse.

• There will also be an increase in domestic violence crimes as many people will stay indoors until the disaster passes (LEO 8).

Disaster Theme #2: Opportunist Criminals Take Advantage of Increased Opportunities for Crime.

LEOs shared that they believed the increase in property crime and looting is generally thought to be a result of the police being focused on other protective measures such as helping people evacuate from high-risk homes and businesses, as evidenced by LEO 40:

• During the disaster the predator/prey frequency is dialed up. With LEO concentrating on order and the saving lives. People take note and realize law enforcement is less focused on crime fighting and more focused on disaster response (LEO 40).

Another view expressed by many was exemplified by LEO 4:

• However, during a disaster, law enforcement tends to be less visible, businesses are closed, and people are mostly indoors, this is an opportunity for criminals to strike. A similar situation immediately after the disaster (LEO 4).

Some LEOs attributed increases in crime to opportunist criminals who take advantage of increased openings to commit crime with no consequences, such as:

- When local police are pulled to a disaster scene, criminals will realize this and use the opportunity to loot or commit property crimes (LEO 10).
- *Many seek to gain from others' losses during disasters* (LEO 4).

Disaster Theme #3: Desperation Makes Otherwise Law-Abiding People Resort to Crime During Disasters.

Other respondents indicated that disaster victims progress to a state of desperation that makes an otherwise law-abiding person commit crime to feed his or her family.

- People affected by serious disasters may commit crimes they normally would never think of in their day-to-day life (LEO 19).
- Now, I realize in some of the worst disasters some people are just reacting in a survival mentality. They are at the end of their rope, while others are trying to take full advantage of others misfortune (LEO 16).

Pandemic Theme #1: The COVID-19 Pandemic Creates Unique Operational Changes for LEOs.

LEO duties during the pandemic are the opposite of disasters. During the pandemic,
LEOs limit their responses and exposure to the public. However, during disasters, LEOs are
constantly responding to incidents and exposing themselves to the public, with little to no fear of
spreading disease.

- This experience is different since it is considered a long-term shelter in place response. I'm used to being out and rescuing people and helping them recover. I don't feel I can really contribute to others since I am not a medical professional (LEO 2).
- Other disasters involved a lot of community involvement and interaction. This pandemic is the total opposite as far as community policing (LEO 56).

Many LEOs also reported that their duties and tactics changed to conform with the need for social distancing.

- Very different. Never expected a virus to be spreading like this one. Forced to take different approach (LEO 7).
- Much different approach to policing. Getting used to wearing masks. Also, inviting people to come outside (LEO 51).
- Suddenly we have to be careful about spreading the virus. More gloves and masks are used by officers. I would not normally wear a mask and gloves simply to speak with a sick person, but now I do to minimize the chances of carrying the virus to my next call, who may be a 75-year-old. I also don't generally interact with people over minor offenses during the pandemic. That reduces my reports, etc (LEO 5).
- We have changed what type of calls for service we will handle. We have taken more reports over the phone or online. We have to wear additional protective gear. We shifted resources to cover our Patrol Division (LEO 42).
- We take deliberate and proactive steps to reduce our interaction with people. That means less community policing and less police projects and initiatives (LEO 12).

Pandemic Theme # 2: The COVID-19 Pandemic Creates Unique Stressors for LEOs.

Although disasters create unique LEO stress that will hopefully be reported in a future article, the COVID-19 pandemic is associated with its own stressors that are different from traditional LEO work and different from disaster response. The inability to see the threat, the potential for family impact, and the unknown duration of the pandemic were all listed as unique pandemic stressors.

- Officers want to see the enemies; however, with the pandemic you are fighting an invisible enemy (LEO 55).
- *Other disasters that I have worked had an end date* (LEO 17).
- A hurricane comes ashore and last a certain amount of time. We have no idea how long this will occur (LEO 31).
- More fear because of the seriousness. Unknown end in sight. Lack of symptoms and fear of exposing friends and family members (LEO 19).
- No proactive enforcement all reactive, constant fear of catching the virus and taking it home to our family (LEO 30).
- This is the first disaster that could have catastrophic effects of contracted by myself, family or coworkers (LEO 25).

Pandemic Theme #3: The COVID-19 Pandemic Changes Crime.

Many LEOs also reported crime changes due to factors stemming from the pandemic. Stay-home orders were said to cause some crimes and calls for service to decrease.

- *Drug overdoses seem to be down though* (LEO 50).
- Our calls for services are drastically down, car accidents are down because traffic is light, burglaries of businesses are up due to businesses being closed (LEO 6).
- Using the COVID-19 pandemic as a reference, crime was normal, but that is because restrictions were virtually enacted overnight with no warning. Since the restrictions have been in place our calls for services are drastically down (LEO 46).
- Crime has been low during COVID-19, I believe that our communities are dealing with the virus in a decent manner (LEO 19).

• Things seem to be quieter because less people are out (LEO 47).

Other crimes, such as domestic violence, were said to increase.

- With COVID-19, people are forced to be home, many are having financial issues and this has caused domestic calls to skyrocket (LEO 1).
- Domestics have increased. The longer this has gone we are seeing more fights outside as well (LEO 50).
- Disturbances are also up as people are living in close quarters with no break from one another (LEO 6).
- Also, seems like more physical and sexual assault crimes due to home isolation and kids being out of schools and staying indoors (LEO 22).

General Theme #1: RA Theory was Consistently Used by Respondents to Explain Crime.

The coders found that the LEOs overwhelmingly exhibited an RA theory lens during disasters and the COVID-19 pandemic alike. Readers can see a consistent application of the role of motivated offenders (LEOs 47, 22, 6, 1, 19, 16, 4, 10, 9, 2, 8, 40), suitable targets (LEOs 47, 22, 6, 1, 4, 10, 9, 2, 8, 40), and lack of capable guardianship (LEOs 47, 6, 4, 10, 13, 6, 40). We observed this same trend throughout the rest of the data, but related quotes will not be added for brevity, since examples are present above. This observed theme is particularly telling since an RA theory lens emerged despite the survey questions being designed to avoid emphasizing any one criminological theory.

General Theme #2: Disasters Pull LEOs Out into the Public and the COVID-19 Pandemic Pulls LEOs Inward Away from the Public to Reduce Disease Transmission.

LEOs articulated that disasters force them to have increased contact and exposure to the public through life saving activities and constant calls for service (LEOs 4, 8, 6, 11, 40, 56). However, the COVID-19 pandemic has resulted in the opposite trend. Respondents indicated that less proactive enforcement and less face-to-face interaction with the public was resulting from

the pandemic for several reasons, mostly related to social distancing and sheltering-in-place (LEOs 12, 19, 47, 7, 51, 5, 42, 56). One respondent indicated that:

• Other disasters involved a lot of community involvement and interaction. This pandemic is the total opposite as far as community policing (LEO 56).

Discussion

Our discussion section and models below reflect differences in LEOs experiences related to crime during disasters versus the COVID-19 pandemic. Some of the more novel findings from this study relate to LEOs' indications of an outward pulling effect from disasters versus the inward pulling effect of the COVID-19 pandemic. One might assert that these differing influences justify substantial differences in an agency's concept of operations during disasters versus pandemics. One could also argue that the disparity should prompt differing approaches to staffing, tactics, equipment, training, and expected stressors.

We also found that LEOs experienced an increase in calls to burglaries during disasters and an increase in investigative activities after disaster, particularly related to disaster fraud.

During the initial months of the COVID-19 pandemic, respondents also experienced increased calls for domestic disturbances and a decrease in calls for many other types of crimes.

Respondents also explained changes to both crime during disasters and crime during the COVID-19 pandemic using observations that aligned with the key components of RA theory.

Changes to Crime During Disasters

Respondents reported that property crimes and domestic disputes increase before a disaster, followed by an increase in burglary and looting during the disaster, and fraud increases after disasters. Figure 1 compiles the three themes identified related to disaster crime. The figure depicts LEOs perceived changes to crime during disaster and the context surrounding those

changes that LEOs reported. The figure transitions from the pre-disaster timeframe through to the post-disaster recovery period. These findings generally align with Frailing et al. (2015), Frailing & Harper (2015), and Prelog (2016), who found that disasters are associated with increased crime rates in some instances. Spencer (2017) also found that crime increased in the Florida counties that were directly hit by hurricanes. Her findings could be reflected here as well since some of the respondents were from Florida. Additionally, the common theme among the respondents relative to the presence of looting align with Harper and Frailing's (2012) arguments that looting is common after natural disasters.

Of the respondents, many of the investigators indicated that disaster fraud increases as the disaster progresses, which aligns with Aguirre and Lane's (2019) findings. Parkinson (2019) also found that domestic violence increased in Australia, following major brushfires. These findings might add some additional detail since LEOs indicated domestic disturbances increase during situations where people shelter-in-place.

RA theory was a prominent theme throughout the responses. LEOs consistently offered the absence of police and unprotected buildings, as reasons for increases to the motivation of would-be offenders during disasters. Another notable nexus to RA theory became evident when respondents discussed an increase in desperation. Some LEOs indicated that career criminals and non-criminals alike would feel a growing sense of desperation due to limited resources from disasters. That desperation was thought to increase the motivation to commit crime, thus opening additional opportunities for motivated offenders, albeit for understandable reasons. The prominence of RA theory tenets in these findings could reflect RA theory's importance in explaining crime changes surrounding disaster. Table 1 shows the factors mentioned by respondents grouped into the major tenets of RA theory.

This research would seem to reinforce the presence and interactions of the tenets of RA theory relative to disaster crime. Table 1 details the apparent interactions that occur throughout the disaster process. An important consideration is that this research is based upon the perceptions of LEOs, so the RA theory's relevance to disaster may be at least partially a product of an RA theory lens from respondents. However, the respondents' application of an RA theory lens aligns with some of the recent literature on disaster crime (Prelog, 2016, Curtis & Mills, 2011). Another important factor is that respondents were not asked about RA theory, nor did they generally indicate any knowledge of RA theory or the three tenets of the theory. Instead, RA theory emerged as a theme after respondents described changes to capable guardianship, motivated offenders, and suitable targets.

Changes to Crime During Pandemics

LEOs' descriptions of crime during the pandemic also reflected the application of RA theory in that the changes were attributed to shifts in the number of motivated offenders and suitable targets. LEOs attributed reductions in crime during the COVID-19 pandemic to the reduced number of people in public. This could represent a decrease in motivated offenders and a decrease in suitable targets. Additionally, respondents indicated that increases in domestic violence were believed to be a result of stress combined with extended periods of close proximity to one's family from the stay-home orders. During both disaster and pandemic, the stay-home orders were thought to create an increase in suitable targets and motivated offenders in close quarters.

At a minimum, the above items indicate that LEOs may often use a RA theory lens in their perspectives. Regardless of the theory used to explain the changes, other research has shown that the COVID-19 pandemic has thus far resulted in some distinct preliminary changes to

crime rates in the U.S. with reductions in residential burglaries and motor vehicle theft in some areas (Ashby, 2020). The reduction in burglaries during pandemic is notable compared to the increase in burglaries during natural disasters, which are thought to represent looting (Frailing & Harper, 2007; LeBeau, 2002).

Along with changes to crime, LEOs indicated that the pandemic is altering their procedures. Overall, a key difference expressed between the LEO role in pandemics versus disaster response is the nature of the response activities. The pandemic resulted in several procedural changes that reflect adherence to social distancing. LEOs also expressed relatively few examples of increased workload, schedule changes, or changes to their key duties during the initial phase of the COVID-19 pandemic. This is in stark contrast to LEOs role as first responders during disasters. These differences alone would seem to justify the delineation of pandemics as a unique threat, distinct from disasters, with unique challenges for which to prepare. Figure 2 depicts the changes to LEO duties and tactics during the pandemic, as communicated by respondents.

LEOs also identified several stressors that are unique to the COVID-19 pandemic. Many of the stressors related to the inability to plan for the threat by visualizing it or knowing when it will end. These stressors might reflect the LEO need to identify threats and threat parameters to mitigate possible impacts. LEOs also expressed fear of spreading the disease to family. Figure 3 depicts the LEO stressors that are unique to the current pandemic.

Limitations

Although the 56 respondents provided more than enough data to reach saturation, the use of 56 qualitative surveys could be viewed as a limitation of this study. However, the use of an online qualitative survey also allowed access to respondents who would have otherwise not had

time to participate. The surveys allowed for access to many respondents at a time when their experiences are fresh in their minds. Our purposeful sampling method could also limit generalization of the findings. Another limitation is that this study is limited to the perceptions of LEOs. LEOs are not likely to have the context provided by yearly crime rates, nor did any respondents claim to have that knowledge. We leveraged the benefit of timing to permit the best recollection among respondents. However, that timing is paired with another limitation since surveys took place during the initial few months of the COVID-19 pandemic, and factors may change over time, particularly if the pandemic lasts for years.

Recommendations

Considerations for Law Enforcement Executives Specific to Disasters

The themes revealed above can help inform agency leaders in their strategic decision making. Disaster themes are particularly relevant for executives in agencies that have limited disaster experience. Agencies with disaster policing experience likely have adjusted and prepared based on their own lessons learned from disasters. However, agencies with little or no real-world experience will need to rely upon research to make data-driven decisions in their preparedness planning. Gaining further understanding of how crime changes during disasters would allow agencies to prepare continuity programs to maintain mission effectiveness. Such continuity programs help agencies prepare to forecast potential changes to crime as it unfolds throughout the disaster process.

Themes indicating that empty structures allow for crime and perceptions of LEO preoccupation with other responses or presence elsewhere might resonate with the more crimeprevention-minded agency leaders. Given personnel shortages during disasters, law enforcement leadership might consider the importance of prior planning and coordination to ensure that a law

enforcement presence and visibility are provided during disaster, particularly in areas with a high concentration of facilities lacking guardianship. Certainly, law enforcement leadership will balance their priorities with the challenges they face and the resources at their disposal.

However, one could imagine that a security mindset could easily fall to the wayside among all the other response and life-saving tasks that materialize for LEOs during disasters. Advanced preparations to deliberately create a police presence during disaster, or even the perception of law enforcement presence based on new information gained during the disaster might help departments reduce later calls for service. This could potentially be facilitated through preexisting agreements among jurisdictions. LEOs from unaffected jurisdictions could be deployed to provide a basic police presence in areas that are likely to see increased crime. Such areas might be high in vacant structures, or otherwise at an increased risk of motivated offenders and suitable targets, that also lack capable guardianship. These suggestions may seem like common knowledge to LEO executives with disaster experience, but may be novel suggestions to LEO executives with limited disaster exposure.

Considerations for Law Enforcement Executives Specific to Pandemics

Certainly, agencies across the world no longer need any lessons on the importance of preparing for a pandemic. However, executives might benefit from applying the LEO stressors and challenges unique to pandemics that have been identified in this study. Continuity plans can formalize any altered procedures to reduce the potential spread of illness within the organization. Incorporating these findings into agency continuity plans is likely the best way to operationalize the lessons learned from this study for future pandemics. This is particularly relevant since agency attrition reduces agency institutional memory and experience over time. Agencies might also benefit from exploring ways to alleviate LEO stressors specific to pandemics through pre-

developed training on personal protective actions during pandemic. Specifically, agency continuity plans might emphasize training on how LEOs can create practices to reduce the transmission of illness to the family since that was a consistently mentioned stressor for LEOs. Agency continuity plans might thus incorporate training resources for LEOs and families to reduce the likelihood that LEOs will spread the illness to family members when they arrive home from work.

Agencies might also reduce internal transmission of illness by developing or enhancing remote training capabilities for LEOs to minimize potential spread through exposure to coworkers. One example of that exposure might be LEOs exposures to one another during mandatory LEO training. Agencies might explore the utility of creating remote training and distance education capabilities for employees to reduce exposure to one another. Additionally, law enforcement agencies might benefit from creating and testing remote work capabilities for LEOs to minimize potential exposure to one another. In many cases, these pandemic-specific continuity concerns do not apply to other continuity events, which could justify specific treatment within organizational continuity planning measures.

Considerations for Law Enforcement Executives During Disasters and Pandemics

Overall, General Theme #2, reflecting the pull felt by LEOs outward during disasters and inward during the COVID-19 pandemic, can be used by law enforcement executives in their general approach to developing a continuity plan. A well-developed continuity plan would address departmental operations during disasters and pandemics. The overarching goals of agency continuity plans relative to disaster might aim to facilitate the agency's ability to support LEOs out in the public for extended time periods. Conversely, the pandemic-related continuity planning goals should aim to pull LEOs inward to minimize the spread of disease. In either

situation, law enforcement agencies will need to be able to maintain mission effectiveness while remaining flexible to an altered concept of operations stemming from a continuity event.

Providing training on those continuity procedures can also likely alleviate some LEO stress by preparing LEOs for operational differences to expect during pandemics versus other types of continuity events, like disasters.

Agencies might also benefit from increased training and adjusted manpower decisions when stay-home orders are imminent. Such training could provide a refresher on LEO tactics and procedures for the impending increase in domestic incidents. Further, agencies might benefit from creating lines of communication to provide them with advance notice of the potential for impending stay-home orders. Development of an advanced notification mechanism to forewarn police departments of impending stay-home orders could trigger the agency's previously developed advanced preparations and training relative to responding to domestic disturbances.

Formalized training on agency continuity procedures can prepare LEOs for operational differences specific to pandemics and specific to disasters, and even specific to disasters that occur during ongoing pandemics. This continuity planning and training will become more important as time passes and the institutional memory of the COVID-19 pandemic and previous disasters are lost. Agencies with limited continuity program development experience might consider seeking FEMA Continuity of Operations (COOP) training. The Department of Homeland Security (2020) also provides information and resources for first responders operating during the current pandemic.

In a less tangible way, executives might also benefit from the knowledge that RA theory is applied seemingly unknowingly by LEOs. The consistent application of an RA lens by LEOs might reflect the utility of the theory to inform training and preparations for everyday law

enforcement work. Many other theories have limited utility in the day-to-day job of law enforcement, but the findings above might indicate that RA theory is well aligned with the job of LEOs, particularly at the individual decision-making level of the LEO. At a minimum, additional research should explore the utility of other theories in explaining disaster crime and pandemic crime.

Recommendations for Further Research

Respondents indicated that they experienced more calls related to domestic violence during stay-home orders during both disasters and pandemics. As a result, we recommend that interpersonal violence should be studied in relation to both phenomena. The relationship between interpersonal violence rates and stay-home orders should also be studied independently of the surrounding circumstances of disaster or pandemic. Further research might also explore the role of rumors and social media during pandemics since disaster myths and misconceptions have been found to hinder responses to previous disasters (Nogami, 2018).

We also found that LEOs believe that domestic violence increases due to the shelter-inplace occurring during both disasters and the COVID-19 pandemic. This might warrant some
further research into the relationship between sheltering-in-place and interpersonal violence
rates. Pandemic crime is also worthy of further attention from different perspectives if only
because the initial body of work indicates that crime changes differently during disasters versus
pandemics.

Future research should also compare specific crime rates during the pandemic to specific crime rates during other disasters in the same areas. Differences within the same communities might add evidence to help determine whether RA theory better explains crime changes than other theories, since many of the changes within the same community would likely be RA theory

factors, and not the relatively stable socio-economic factors that some criminological theories use to explain some types of crime.

Conclusion

This study shows that the respondent LEOs believe that disasters and the COVID-19 pandemic present unique changes to crime. Disasters are complex, with multiple changes occurring simultaneously, and they create an outward pulling effect where LEOs are more exposed to the public through their response activities. The COVID-19 pandemic, while also complex, creates an inward pulling effect, and challenges LEOs abilities to conduct law enforcement while maintaining social distancing. Thus, understanding of each operational environment should be multifaceted with a general understanding that disasters pull LEOs outward to support the community while pandemics pull LEOs inward and physically away from community members. One can imagine drastically increased challenges when a disaster strikes during a pandemic and agencies are forced to balance between the inward pull of the pandemic and the outward pull of the disaster. Agency continuity plans might thus aim to prepare for that type of multi-faceted event.

This study also aligns with a growing body of disaster crime literature indicating that some crimes, such as burglary and fraud, can increase surrounding disasters, depending upon certain factors. The study of crime during disaster is unfolding into a complex web of variations depending upon the variables at play. Indications that crime simply increases or decreases during disaster are oversimplified. Indeed, the phenomenon of disaster crime is complex and multifaceted.

The study of crime during pandemics, although in its infancy, is already also developing into a distinct area of study that should not be lumped together with disasters. This study seems

to align with the limited body of pandemic crime literature, showing decreases to some types of crimes during pandemic (Ashby, 2020). However, LEOs also indicated that family violence increases during sheltering-in-place stemming from disasters and the COVID-19 pandemic.

LEOs explanations of changes to crime patterns during disasters and the COVID-19 pandemic often reflected RA theory factors. From a theoretical lens, this research does seem to reinforce past researchers' use of RA theory to explain disaster crime, at least at the level of the individual committing the crime. Additionally, although further research is warranted, this research also indicates that RA theory factors might also explain changes to crime during the current pandemic.

Law enforcement executives can use these findings to inform their decisions relative to agency continuity planning and subsequent training for LEOs. Such formal planning and training are particularly important for agencies that have limited disaster and pandemic policing experience. Academics might also benefit from the findings that RA theory emerged as the primary theoretical lens that LEOs applied to their observations on crime.

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Tables and Figures

Figure 1

LEOs' reported perceptions of changes to crime throughout disaster

Pre-Disaster Disaster Increased Property Crime Due to Evacuated Homes and Post-Disaster Increased Property Crime Due Businesses Increase in Disaster Fraud Due Increase in Domestic Disputes or Domestic Violence if People are Required to Stay Indoors for an Extended Time (1) Evacuat Businesses (2) Police P (1) Evacuated Homes and (1) Increased Funding for (2) Police Prioritizing Life Disaster Benefits, which are Saving Tasks Susceptable to Fraud (3) Law Abiding People (2) Increased Opportunities for Becoming More Desperate Scams against Disaster Victims (4) Opportunist Criminals Seeing More Opportunities

Absence of Capable Guardian	Presence of Motivated Offender	Presence of Suitable Target
Perception of less police presence and little if any proactive anti-crime or deterrence activities occurring due to police focus on life saving activities and increased calls for service Disaster relief funding such as disaster food stamps and FEMA funds provided with limited vetting or restrictions	Disaster victims and experienced criminals become more desperate for resources as the disaster progresses Experienced criminals and desperate disaster victims become more motivated when they observe evacuated properties and unprotected resources Experienced fraudsters become more motivated upon seeing available disaster funds and easily scammed disaster victims	Homes and businesses left vacant from evacuations Homes and businesses increase in attractiveness as targets because damage leaves them accessible Sharp increases in disaster assistance funding and programs create more opportunities for fraud Disaster victims who are desperate and overwhelmed become suitable targets for scammers

Figure 2

Changes to LEO duties and tactics stemming from the pandemic

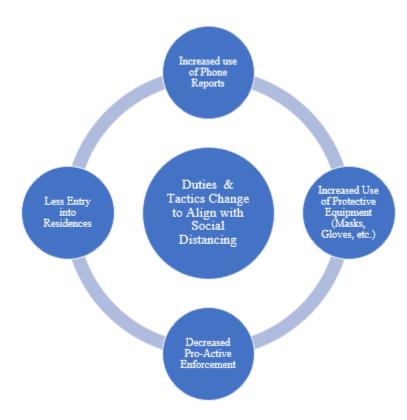


Figure 3

Changes to LEO stressors unique to pandemic



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