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Is crime a real estate problem? A case study of the neighborhood of East Liberty, Pittsburgh, Pennsylvania

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ABSTRACT

This study documents an intervention designed and implemented using the tenets of community operational research (community OR) approach to address crime in East Liberty, a neighborhood in the East End of the City of Pittsburgh, Pennsylvania. The intervention was implemented by a community development organization (CDO) with active engagement by the community. The multi-pronged strategy included real estate acquisition of crime hot spots, use of uniformed off-duty police, effective property management and a strengthening of the neighborhood's informal social controls. We used the community OR approach to examine both the processes and outcomes of the intervention. We found that the initiative was associated with a 49% reduction in residential crime in the neighborhood over the period 2008–2012, a trend that held steady till 2015 which represents the latest data analyzed for the present study. Evidence of the lasting impact of our strategy is that there has been little observed decay in the crime reduction even after off-duty police were withdrawn. We conclude that a community-oriented approach that addresses crime should emphasize strategies to improve and leverage the neighborhood's social cohesion and informal social controls for crime reduction to be sustainable. Similar interventions in the future may benefit from the study by conceptualizing and implementing community-engaged initiatives that are closely aligned to community OR principles.

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1. Introduction

An impressive body of work exists at the interface of housing and operational research (OR) (Bayram, Solak, & Johnson, 2014; Johnson, 2011; Zong, Karner, Kuby, & Golub, 2017). Johnson (2011), for example, provides an exhaustive list of literature that examines OR models of housing and community development, with an emphasis on decision modeling applications. Several of the publications reviewed focus on issues with high social context; low income households, affordability, inequities, sustainable communities, etc., and are geared towards addressing policy and practice concerns. However, most of the publications have limited utility because they depend on quantitative methods that are ill equipped to reflect the contextual realities and ill-structured nature of their areas of research. Apart from the aforementioned, of the eighty plus articles surveyed by Johnson (2011) that examine housing and community development using OR methods, we could not find one with a crime focus.

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This study seeks to address these shortcomings using a mixed methods approach. A key component of the approach borrows from numerous criminology studies showing that in high-crime neighborhoods, a disproportionate number of the crime incidents occur in only a small fraction of the geographical area (Braga, Hureau, & Papachristos, 2011; Braga, Papachristos, & Hureau, 2010; Sherman, Buerger, & Gartin, 1989; Spelman, 1995; Weisburd, Bushway, Lum, & Yang, 2004; Weisburd and Braga 2006). The insights from these studies form the basis of the hotspot theory of crime, which has often been used as the rationale for carefully targeting crime hotspots. These micro-interventions are often carried out by the police or by leveraging the influence of place managers responsible for maintaining order and normalcy in the affected areas (Madensen and Eck 2008; Eck and Eck 2012; Maze-rolle, 2014). While this approach has been shown to be effective, it is not without its shortcomings (Eck, 2015; Weisburd, Groff, & Yang, 2014). Weisburd et al. (2014) convincingly articulated this viewpoint when they stated that “our findings suggest that formal social controls, such as law enforcement, may not be the only methods that can bring effective crime control at hotspots, and indeed that such formal controls may not be enough for effectively altering trajectories of crime at places in the long term.”

In response to these concerns, we used the community operational research (community OR) approach to frame and uncover

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evidence for a more effective, sustainable crime-reduction strategy. We draw on the hotspot intervention approach, but we see the community playing an integral role in its design and execution (Fabusuyi & Hill 2013). The community OR approach weaves together multiple strands of enquiry to provide a platform robust enough for the analysis. The first strand is a systems perspective element that defines the design of an evaluation framework. The second strand is the use of multiple methods that are informed by a series of theories and a data analysis obtained from multiple sources, both qualitative and quantitative. The third strand is the acknowledgement of the centrality of the community in the design and implementation of the intervention, with a community development organization (CDO) acting as the conduit for the change and the neighborhood's residents as the CDO's core constituents. We demonstrate the community OR approach, using as a case study a retrospective assessment of the impact of a novel, real-estate-driven crime-reduction strategy implemented between 2008 and 2012 in East Liberty, a neighborhood in the East End of Pittsburgh, Pennsylvania.

We organize the balance of the paper as follows: Section 2 of the paper presents the background and impetus for the study. Section 3, the methodology section addresses the framing of the problem, the study approach and the theoretical basis of the intervention. Program implementation is the focus of Section 4, and we discuss the evaluation approach in Section 5. The section emphasizes the plurality of the theories and the mixed methods used for the study. It also documents how we triangulate data to arrive at findings that are more robust. In Section 6, we document the study's results, Section 7 provides a discussion of the results and Section 8 concludes.

2. Background context

From the late 19th century through the mid-20th century, the East Liberty neighborhood in Pittsburgh's East End was bustling and successful. During this period, East Liberty had a thriving business district, which was the third largest central business district (CBD) in the Commonwealth of Pennsylvania. The homes in the neighborhood were built for the leaders of the industries that dominated Pittsburgh's business landscape (East Liberty Development Inc., 2015; Toker, 1994). The neighborhood itself was a transportation hub, with rail, roads, and streetcars bringing businesses and shoppers to the area. However, beginning in the 1960s, disastrous urban planning nearly destroyed East Liberty, including the misguided building of a pedestrian mall along with a number of high-density high-rise housing projects. The area was thrown into turmoil, and within a few years, East Liberty became a blighted neighborhood. Unemployment and criminal activity rose, and the neighborhood was perceived as unsafe (East Liberty Development Inc., 1999).

East Liberty Development Incorporated (ELDI) was formed in 1979 to address these problems and work towards revitalizing the neighborhood. Through a community-driven process, a 10-year master plan for development was created, entitled "A Vision for East Liberty" (East Liberty Development Inc., 1999). This document, recently updated with new ideas and initiatives, drives ELDI's work. ELDI collaborates closely with neighborhood stakeholders in planning, advocacy, facilitation, and investment to bring about positive change in the community. The CDO was able to leverage the active community engagement in implementing the crime reduction strategy. This approach echoes Keys (1987) definition of a CDO as an organization that exists to provide services to the community. The term "community" was described as "a social system characterized by a strong network of relationships which provides a sense of belonging to those who are a part of it."

Major efforts from the master plan enabled the replacement of the high-rise housing projects with low-rise, townhouse-style mixed-income housing. Other initiatives focused on bringing businesses, shops, and restaurants back to the area. Within the residential area, ELDI seeks to create a mixed-income neighborhood that is safe, stable, and sustainable, with development efforts that benefit all residents. A key strategy is to gain control of the abandoned and problematic properties within the neighborhood. This is driven by the realization that chronic and perpetual crime hotspots thrive in an ecosystem that allows criminal activities to flourish, and that properties controlled by slumlords are arguably the most indicative of a crime-enabling environment (Eck, 2015; Mazerolle, 2014).

A few ELDI staff live in or close to East Liberty. From 2006, two ELDI staff members have lived near the 500 Block of North Negley Avenue, one in East Liberty and the other in Garfield, a neighborhood immediately west of East Liberty. Each was regularly exposed to crime in the neighborhood. One characterized his commute to and from work on foot through the neighborhood as a challenge that provides something new each day. The other staff member described the impact of crime on himself and his family on Mellon Street as "existential." However, he said that by 2011, he started noticing positive changes with regards to crime incidents, observations that were corroborated by comments from other residents. These observations are what led ELDI to commission the present research study to provide an objective assessment of what transpired in the neighborhood from 2008 to 2012.

3. Methodology

3.1. Problem framing and study approach

Before defining the research study and its theoretical underpinnings, we conducted a preliminary analysis using data from the City of Pittsburgh Bureau of Police. The data showed that from 2008 to 2012, crime incidents had declined by 26% in East Liberty compared to 20% in the surrounding neighborhood that comprises of all the neighborhoods that share at least a boundary with East Liberty and 16% citywide. We subsequently held a series of meetings with ELDI staff to agree on what issues ELDI intended to address with the study and to define the scope of the project.

This phase of the study was required to reflect the community's interests. Johnson (2012) and Midgley, Johnson, and Chichirau (2017), provide compelling arguments on the need to engage with the client, stating that this phase is fundamental to the process and cannot be reduced to a mere add-on. Engaging with the community or its representatives avails the researcher a more nuanced assessment of the problem space and provides invaluable insight on shaping the scope of the study. The need to consider the scope of a project goes back to the concept of boundary critique, attributed to Ulrich (2000) though based on a much earlier argument by Churchman (1970). We would however like to say that the boundary issue for the present study was only given limited attention given the study's retrospective nature.

The scoping meetings revealed that ELDI was interested in the following:

1. Ascertaining the magnitude of the decrease in crime incidents and determining the spatio-temporal nature of the observed decline.
2. Assessing the extent to which the decrease could be attributed to ELDI's crime-reduction strategy.
3. Providing structure as to how the crime reduction strategy was implemented with the objective being the ability to replicate the strategy in the future.
4. Determining the long-run sustainability of the strategy.

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