

# CONTROLLING DRUG AND DISORDER PROBLEMS: THE ROLE OF PLACE MANAGERS\*

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*This article explores the role of place managers in controlling drug and disorder problems on 100 street blocks in Oakland, California. We use self-reports from a sample of place managers to explore their role in changing the social and physical conditions of street-block activity within the context of a randomized field trial in Oakland. On-site observations of the changes in the social and physical conditions of 100 street blocks were conducted and used as our outcome measures. Our results suggest that street blocks where place managers engaged in collective crime control activities had significantly fewer signs of disorder and greater levels of civil behavior. Our results also show that community cohesiveness on a street block was associated with fewer males selling drugs.*

Consensual crimes, like drug dealing, need amenable places. Places are amenable when some of their features increase the likelihood that a crime will occur. For example, places located near bars (Green, 1996; Roncek and Bell, 1981; Roncek and Maier, 1991), places that have multiple access points (Beavon et al., 1994; Eck, 1994; Green, 1996), places near main thoroughways (Weisburd and Green, 1994), places with weak place management (Eck, 1994), and places with indicators of decay (Green, 1996; Wilson and Kelling, 1982) all tend to be places where people choose to sell drugs.

Recognizing the importance of place attributes in explaining criminal events, Eck (1994) recently extended routine activities theory to address the significance of amenable places and the role of "place managers" who

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discourage criminal events at specific locations (see also Felson, 1995b). Place managers are individuals such as building managers, security guards, and homeowners who discourage crimes and reduce opportunities for criminal events through their presence and daily activities at specific places (Eck, 1994; Felson, 1995b). This extension of routine activities theory suggests that opportunities for crime are not simply created by motivated offenders (who have ineffective handlers) but rather emerge when locations are not well managed and controlled by place managers. Eck's (1994) extension of routine activities theory suggests, therefore, that criminal events (like drug dealing) occur when motivated offenders, who have ineffective handlers, choose amenable places that lack effective place managers.

Our study examines the role of place managers in controlling drug and disorder problems on 100 street blocks in Oakland, California. Fifty of those street blocks were randomly assigned to the Oakland Police Department's civil remedy program ("Beat Health"), and the other 50 street blocks were randomly assigned to the general patrol division. The Beat Health program seeks to control drug and disorder problems in several ways: by building working relationships with place managers; by using citations for building, health, sewer, sidewalks, and rodent control code violations; by drawing on drug nuisance abatement laws; and by coercing third parties (such as property owners, apartment superintendents, and business owners) to clean up blighted and drug nuisance places. The general patrol division officers, who targeted the 50 control sites, continued to conduct surveillances and make arrests in the 50 control street blocks and did not go out of their way to build working relationships with place managers.

This analysis assesses the crime control benefits of place manager activities across the 100 street blocks in our study. To explore the role that place managers play in changing the social and physical conditions of street-block activity, we use self-reports of place managers' collective and individual actions, their involvement in neighborhood crime prevention activities, their fear of crime, and their feelings of community cohesiveness. On-site observations of the changes in the social and physical conditions of the 100 street blocks were conducted and used as our outcome measures.

Our analysis begins with a discussion of the theoretical dimensions of place managers within the context of routine activities theory and of research on community self-regulation at the street-block level of analysis. We then discuss Oakland as our research site and the experimental field trial that provides the backdrop for our study. Next, we discuss the methods of data collection and the variables used in our analysis. We then

present our research findings and conclude with a discussion of the theoretical and policy implications of our research.

## THEORETICAL BACKGROUND

Ecological explanations of crime reflect a dominant theme in criminological research (Park et al., 1925; Shaw and McKay, 1942). One recent area of research in the ecological tradition examines problems of social and physical incivilities, resident fear and withdrawal, and the dynamics of neighborhood decline (e.g., see Skogan, 1990; Wilson and Kelling, 1982). Another, yet closely related, line of inquiry focuses on the role of residents as building insulators in order to solve disorder problems and reverse the spiral of decline (see Bursik and Grasmick, 1993; Greenberg and Rohe, 1986; Rosenbaum and Lavrakas, 1995; Taylor, 1988; Taylor and Gottfredson, 1986; Taylor and Harrell, 1996; Taylor et al., 1984). Recent research builds upon this latter line of inquiry and looks specifically at the role of place managers in decreasing crime and disorder problems at crime-prone places or "hot spots" of crime (see Eck, 1994; Felson, 1995b).

Crime-prone places (or hot spots) typically comprise just one street block. These street blocks qualify as behavior settings (Felson, 1995b; Perkins and Taylor, 1996; Taylor, 1988, 1997b; Taylor and Harrell, 1996; Taylor et al., 1984, 1985) that are "regularly occurring, temporally and spatially bounded person-environment units" (Taylor, 1988:128). They are made up of three major components: the setting participants, a standing pattern of behavior, and the surrounding physical environment that contains the behavior (Barker, 1968; Taylor, 1988; Wicker, 1979).

Street blocks function as behavioral settings for several reasons. First, street blocks are spatially bounded by cross streets and by the front of houses (Felson, 1995b; Taylor, 1988). This spatial bounding of the physical street block encloses the behaviors and supports the activities within the street block (Taylor, 1988). Second, street blocks have standing patterns of behavior, or rhythms of recurring behavior and activity, that are somewhat predictable and routine (Taylor, 1988, 1997b). These recurring patterns help residents get to know one another by observing the other residents' routines and developing either negative or positive sentiments about one another (Taylor, 1997b). Third, street blocks have participants who are involved, to varying degrees, in the behavior setting and the maintenance of its setting program (Taylor, 1988, 1997b). Finally, unless the street block has an extremely high turnover rate or very high levels of heterogeneity among street residents, "norms about acceptable and unacceptable behavior in the area are generally shared" (Taylor, 1997b:9; see also Skogan, 1990).

Taylor (1988, 1997b) offers several reasons why street blocks are important behavior settings: (1) the street block is most likely to be the locus of neighborly ties; (2) communication among households is "stronger within street block than across blocks" (1988:171); and (3) local improvements are more likely on the street block than the neighborhood level.

Residents of a behavior setting, or street block, are hypothesized to engage in a variety of territorial behaviors that either maintain standing patterns of behavior (the setting program) or enhance informal social control of the behavior setting (Barker, 1968; Taylor, 1988). Several factors are thought to affect territorial behaviors. For example, Skogan (1986, 1990) argues that increases in disorder or incivilities lead to fear of crime, which in turn leads to a withdrawal of residents and a decrease in the amount of informal social control. In this scenario, increases in crime problems are likely to follow. While empirical research identifies complexities within this causal sequence, the research findings generally support the argument that fear of crime tends to lead to withdrawal behaviors and to more perceived crime and disorder (Bursik and Grasmick, 1993; Perkins and Taylor, 1996; Taylor, 1996a; Taylor and Harrell, 1996).

A natural extension of the "spiral of decline" line of inquiry is research that examines the abilities of residents of a behavior setting (e.g., a street block) to enhance informal social control of the behavior setting and thus reverse the spiral of decline. The theoretical models that describe these relationships specify that the behavior and cognition of individuals are important. For example, self-regulation and related notions of community cohesiveness and local social ties have been conceptualized and found to be important insulators against crime problems at the neighborhood and street-block level (Brown and Altman, 1981; Bursik and Grasmick, 1993; Taylor, 1996a; Taylor and Gottfredson, 1986). Similarly, recent research in Chicago finds that "collective efficacy, defined as social cohesion among neighbors combined with their willingness to intervene on behalf of the common good, is linked to reduced violence" and is an important factor in insulating even poor communities from developing crime and disorder problems (see Sampson et al., 1997:916).

Routine activities theory presents another important theoretical perspective that seeks to explain variations in crime problems across different communities, neighborhoods, and street blocks (see Cohen and Felson, 1979). Since the first presentation of routine activities theory in 1979, Felson has extended the original dimensions of the theory to account for variations in the supervisory role of those people who have an interest in keeping potential offenders out of trouble (see Felson, 1986, 1987). Felson refers to these people as "intimate handlers." Most recently, Eck (1994) and Felson (1995b) extended the conceptual constructs of routine activities theory to delineate explicitly the importance of "amenable places" and

those who discourage crimes at criminogenic places. Eck (1994) refers to these people as “place managers.”

Eck (1994) points out that when places (e.g., addresses or street blocks) are made prominent in explaining criminal events, there is a curious asymmetry in the arrangement of routine activity theory’s principal constructs: guardians take care of targets and handlers take care of offenders, but (apparently) no one takes care of places. Earlier Felson (1987:917) had commented that “the street belongs to everyone, hence is supervised by no one, except for an occasional policeman who does not know who belongs there anyway . . . and so the street system exposes people to serendipity and calamity.”<sup>1</sup> However, it is well-known that places are, in fact, controlled by people both formally and informally—narcotics officers policing drug hot spots (Weisburd and Green, 1995); store owners keeping young people away from hanging out in the front of their stores (Eck, 1994; Skogan, 1990); apartment superintendents working to minimize “trouble” in their buildings (Green, 1996). Stenning and Shearing (1980) also point out that business developers sometimes take care of sewers, sidewalks, streets, and security for a fee (see also Felson, 1987). These people are not guarding a potential target, but rather are controlling the activities at specific places. Eck (1994) defines these people as place managers: those who discourage crime by controlling specific places (see also Felson, 1995b). Eck’s (1994) recognition of the role of place managers inspired him to reorganize routine activities theory as two triplets:

<i>Supervision of:</i>	Target	Offender	Place
<i>Directly supervised by:</i>	Guardian	Handler	Manager

Importantly, this re-tailoring of routine activities theory explicitly includes the interaction between places and the people who have a stake in the usage of a particular place or area (Eck, 1994; Felson, 1995b). With these modifications to routine activities theory, the criminal event equation can be restated as follows:

Crime occurs when there is the convergence in time of a desirable target without an effective guardian, a motivated offender without an effective handler, at a facilitating place without an attentive manager (Eck, 1994:29).

The role of place managers in discouraging crime varies by the level of perceived or assumed responsibility. Felson (1995b) defines four levels of responsibility, each varying by the degree to which a criminal event may be discouraged and by the level at which place managers respond to

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1. Community policing and problem-solving efforts certainly increase the likelihood that police officers are going to know the people hanging out on the street.

potential deviant behavior (see also Barker, 1968; Clarke, 1992; Eck and Wartell, 1998). For example, personal or primary responsibility for places is taken by those who are owners of places or those people who have a high stake in the place (e.g., typically homeowners and store owners); secondary responsibility is present when people are employed to regulate behavior and are often *assigned* a crime prevention role, either directly or indirectly at particular places (e.g., beat officers, doormen); place managers have tertiary responsibility for discouraging crime when they are assigned generally to a task and assume some preventive responsibility (e.g., postal delivery person, service repair person); and people can assume general or quaternary responsibility by virtue of their occasional presence at a place (e.g., store customers, visitors).

Place managers are primarily concerned with the activities at places that are directly under their control—the store owner who controls the activities of people coming in and out of his or her store; the apartment superintendent who maintains security at the apartment complex. In practice, however, many place managers have interests in controlling activities beyond the residence or business that is under their direct control and take on additional crime control responsibilities for the street block. Residents who have a “street presence” and store owners who work to control the activities and appearances of the entire street block are examples of place managers who extend their control activities beyond the place that is under their direct control.

We include a variety of place managers with varying role relationships to the street block and the target address in our study: some of our place manager respondents are residents who extend their crime control efforts to encompass the entire street block; some are store owners only concerned with the activities in and around their store; others are apartment superintendents who only manage the activities at the property under their control.

We expect that the roles of place managers do not occur in a vacuum but rather within a complex framework of police problem-solving efforts, community activism, resident involvement, and informal social control mechanisms operating at the street-block level. For example, we expect that police problem-solving efforts, which engage potential place managers (like business owners) to clean up street blocks, would be most successful on street blocks that have high levels of cohesiveness. In other words, we suggest that place managers need support either from the police (formal agents of control) or from their neighbors (informal agents of control) in order to bring about change on a street block. The following sections describe our empirical test of the role of place managers in controlling crime problems on street blocks in Oakland, California.

## OAKLAND AS THE RESEARCH SITE

Oakland is the eighth largest city in California (State of California, 1996). The 1990 census data indicate that there are 372,242 people living within the 53.8 square miles of the city. Oakland lies across a bay to the east of San Francisco. The city is ethnically diverse; about 45% of the population are African-American, about 15% white, and more than one-third Asian. Since the 1960s the average household size has been steadily dropping and there are now an average of 2.34 persons per household. The median income for residents of Oakland is about \$20,000 per year, and more than 16% of families live below the poverty line. During the early 1980s, Oakland experienced severe levels of unemployment, which reached 12.9% in 1982.

The city of Oakland has more than 140,000 housing units of which more than 50% are rented. In 1989 the median rent for a one-bedroom apartment was \$560 per month, which represents a 12% increase in rents since 1985. Most of the housing units in Oakland are single-family homes, reflecting a style of housing common throughout the West Coast of the United States. As with other cities in the United States, the city of Oakland experienced a large increase in real estate prices during the mid-1980s. By the 1990s, however, the cost of purchasing property had declined and the median sale price of an Oakland home was about \$185,000 (Oakland Office of Community Development, 1992).

## OAKLAND'S BEAT HEALTH PROGRAM

The Oakland Police Department created the Beat Health Unit in October 1988 and mandated the unit to reduce drug and disorder problems across the five police beats in the city. Five Beat Health teams, each comprising one uniformed officer and a police service technician, provide services throughout the city of Oakland. Beat Health police officers, working in conjunction with their partner police service technicians, "open" a case after making a preliminary site visit to a place that has generated emergency calls, a number of narcotics arrests, or special requests from community groups for police assistance. Police begin the Beat Health process by visiting nuisance locations and establishing working relationships with place managers or with those people who are thought to have a stake in improving the conditions of a target location. These place managers are typically homeowners, apartment superintendents, landlords, and business owners living or working at the target address or in the immediate surroundings (the street block). During the early stages of the intervention, police communicate landlords' rights and tenants' responsibilities, provide

ideas for simple crime prevention measures, and gain the citizens' confidence that the police are supporting them in their efforts to clean up the problem location.

Beat Health officers also coordinate site visits by the Specialized Multi-Agency Response Team (SMART), a group of city inspectors. Depending on preliminary assessments made by the police, representatives from agencies such as Housing, Fire, Public Works, Pacific Gas and Electric, and Vector Control (a government agency that deals with rodent infestations) are invited to inspect a problem location and, where necessary, enforce local housing, fire, and safety codes. About half of all targeted locations have SMART inspections and about two-thirds of the targeted sites are cited for at least one code violation from a city inspector; the most common type is a housing code violation.

The police department also draws upon its in-house legal expertise and, as needed, uses a variety of civil laws to bring suit against the owners of properties with drug problems. For example, the Uniform Controlled Substances Act makes every building where drug use occurs a nuisance, thus allowing the city to use the civil law to eliminate the problem by fining the owner or by closing or selling the property. About 2% of cases result in formal court action against a property owner.

## RESEARCH METHODS

Our study assesses the role of place managers in reducing disorder problems, drug problems, and signs of incivility. Although we collected our data within the context of implementing the Beat Health program under controlled experimental conditions, we present the results of a nonexperimental analysis of the data. We examine the 100 cases in our study to assess the relationships between several independent variables (e.g., place manager activities, cohesiveness, fear of crime, demographic characteristics of the place managers identified on the street blocks in our study, number of properties on the street block) and the outcome variables of disorder, drug activity, and signs of civility. We also control for whether the street block was targeted by the Beat Health Unit or the general patrol division officers. We expect that those street blocks where place managers perceive high levels of social cohesion and those blocks with high levels of place manager activity will have greater decreases in disorder and drugs and greater increases in signs of civility than those places that have weak place management.

The unit of analysis in our study is the street block: A total of 100 street blocks were included in the study. The street blocks were eligible for inclusion in our study when a "place" on the block (a residential or commercial property) was referred to the Beat Health Unit as having a drug



and/or blight problem. Cases were referred to the Beat Health Unit via hotline calls, community meetings, and periodic examination of narcotics calls for service and vice arrest.<sup>2</sup> Existing Beat Health locations, old Beat Health locations, locations typically not targeted by Beat Health (e.g., Section 8 housing sites), places that had already been targeted by the patrol division, and places that were deemed an "imminent danger" (e.g., child abuse problems evident at the site) were not included in the study for random allocation. Apart from these noneligible places, all problems sites that were referred to the Beat Health Unit from October 15, 1995 through December 15, 1995 were included in the study. As such, the cases included in our study largely reflect the population of places typically targeted by the Beat Health Unit. About 14% of the sites the Beat Health Unit typically targets are commercial properties, and about three-quarters of the sites that are targeted in any one year are rented or leased properties.

All cases eligible for randomization were plotted on a computerized map of Oakland. If an incoming case fell within a 300 foot radius (about one street block) of a case already randomly allocated, the case was withheld and not allocated to either the patrol division (control group) or the Beat Health Unit (experimental group).<sup>3</sup> This case selection criteria allowed for an uncontaminated examination of the effects of the experimental and control treatments on each street block without fear of direct

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2. The Beat Health Unit targets about 330 cases every year, of which about 14% are commercial properties and the rest are residential properties (see Green, 1996). To enable close examination of the impact of Beat Health on residential and commercial properties, we used a blocked, randomized experimental design by assigning commercial properties to one block and residential properties into a second block. We randomized cases in the study within statistical blocks because we believed there were substantial differences between drug-dealing activities at commercial and residential properties (see Green, 1996). Randomized block designs, which allocate cases randomly within pairs or groups, minimize the effects of variability on a study by ensuring that like cases are compared with one another (see Lipsey, 1990; Neter et al., 1990; Weisburd, 1993). There are two basic advantages of using a block randomized design: First, computations with randomized block designs are simpler than those with covariance analysis, and second, randomized block designs are essentially free of assumptions about the nature of the relationship between the blocking variable and the dependent variable, while covariance analysis assumes a definite form of relationship. A drawback of randomized block designs is that somewhat fewer degrees of freedom are available for experimental error than with covariance analysis for a completely randomized design (Neter et al., 1990).

3. While a larger catchment area radius than 300 feet would have been better (indeed the larger the uncontaminated catchment area the better) the realities of withholding cases from intervention raises ethical considerations. By using the 300 foot criteria, we sought to minimize the ethical problems of withholding cases while still maintaining our ability to assess the displacement and diffusion effects without proximal overlap.

proximal contamination from a nearby site. As such, this design allowed for an analysis of street-block activity free of some of the confounding problems that arise with overlapping catchment areas and duplicate cases that could potentially bias the evaluation results (for discussion of these issues, see Green, 1995).

Most of the study sites, as noted, were rental properties (77%) and 12 of the experimental sites and 11 of the control sites were owner occupied. Of the dozen owner-occupied experimental sites, 10 involved problems with relatives of the owner; the most typical situation was when the children or grandchildren of an elderly owner were involved in drug dealing. At one experimental location, the problem was the owner. Ten of the experimental sites and seven of the control sites were completely or partially vacant.

Drug dealing was reported as a major problem prior to the start of the experiment in approximately three-quarters of the locations in both groups (Note: Sites could have multiple problems). Other problems in the experimental sites included drug use ( $n=14$ ), blight ( $n=14$ ), and nuisance problems such as noise and unkempt yards ( $n=7$ ). Of the control sites, 36 involved drug-dealing problems, followed by blight ( $n=11$ ), other criminal offenses ( $n=6$ ), drug use ( $n=4$ ), and nuisance problems ( $n=4$ ). Other complaints included rat and roach infestations, prostitution, trespassing, problems with pit bulls and/or other animals, and other health and welfare issues.

Beat Health officers personally visited all but 2 of the 50 experimental sites. Of the two properties not visited, one was owned by a reputable individual known to the Beat Health team and contact was made by warning letter and telephone calls. The other property was not visited, but the owner was sent a warning letter. For the other 48 experimental sites, Beat Health officers made an initial visit to the target site to confirm the nature of the problem. The officers checked out the condition of the property from the outside, particularly if trash, blight, hazards, or animal problems were reported. In 35 of the 50 experimental locations, the Beat Health officers talked to the property owner in person or by telephone. Contact was also made with tenants, neighbors, and owners/managers to discuss problems at the target locations. These initial activities by Beat Health officers constitute the primary efforts made by the police to build working relationships with place managers in the experimental sites.

Other formal actions taken by Beat Health officers at the experimental sites included SMART inspections ( $n=23$ ), sending general warning letters ( $n=9$ ), sending 11570<sup>4</sup> warning letters ( $n=13$ ), issuing beat orders ( $n=9$ ), working with property owners to evict troublesome tenants ( $n=19$ ), and

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4. Section 11570 of the California Health and Safety Code states:  
"Every building or place used for the purpose of unlawfully selling, serving,

property clean-ups. During the 23 SMART inspections instigated against experimental target sites, city inspectors issued 9 housing and safety citations, 6 vector control violations, 2 sidewalk citations, and 1 sewer violation. The city attorney's office did not file suit against any of the experimental site owners during the period of our experimental tracking (one year).

## THE DATA

The data used in this study are drawn from two data collection efforts: first, a survey of 398 place managers; and second, a series of on-site observations of the social and physical conditions of the 100 street blocks in our study. The on-site observations were conducted both before the start of the experiment and at the end of the experimental intervention period. Our study differs from many other studies of street-block activity in that we use both on-site observations and respondent perceptions in our research.<sup>5</sup> Prior research typically measures street-block activity (and changes on street blocks) using either surveys of residents (see Greenberg and Rohe, 1986; Hirshfield et al., 1996; Rosenbaum and Lavrakas, 1995; Taylor et al., 1984) or through on-site observations (see Taylor, 1995c, 1995d, 1996a, 1997a).<sup>6</sup>

Surveys of residents are commonly used to explore perceptions of physical or social disorder in an area (Bursik and Grasmick, 1993; Greenberg and Rohe, 1986; Taylor and Gottfredson, 1986). Surveys can be reasonably priced in comparison with some other methodologies (e.g., ethnographies, case studies, on-site observations), and they are "easily tailored to the specific issues the researchers or evaluators might want to address" (Taylor, 1995b:10). Surveys also allow researchers to explore the reasons why some places remain free from crime problems and why crime flourishes in others. Further, Rosenbaum and Lavrakas (1995) suggest that more accurate pictures of residents' (and place users') behavior and cognitions can be obtained through self-reports, for several reasons. First, residents can provide up-to-date information about their perceptions and reactions to their environment, or what Rosenbaum and Lavrakas (1995:310) call the "psycho-social geography of small places." Second,

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storing, keeping, manufacturing, or giving away any controlled substance, precursor or analog specified in this decision, and every building or place wherein or upon which those acts take place, is a nuisance which shall be enjoined, abated and prevented, and for which damages may be recovered, whether it is a public or a private nuisance."

5. See Perkins and Taylor (1996) and Taylor (1996b), however, for two studies that did use on-site assessments as well as resident surveys.

6. See Taylor (1997b) for an excellent, detailed review of the issues concerning different methods available for assessing sign of incivility.

self-report interviews can be targeted at place users (e.g., business owners, schoolteachers, customers, residents) to obtain a more representative perspective on the social and physical reality of the place in question (Rosenbaum and Lavrakas, 1995).

In contrast to surveys, on-site assessments of signs of incivility are typically more time consuming and costly. Nonetheless, Taylor (1997b) has found that on-site assessments provide reliable results with low levels of contamination (less than 20%).

Extensive work employing both surveys of residents and on-site assessments by trained observers has discovered that residents' perceptions of disorder and on-site assessments of disorder may not be measuring the same underlying construct (Perkins and Taylor, 1996; Taylor, 1995c, 1995d, 1996a, 1997a). On-site assessments appear to be measuring the actual physical conditions of a location, while surveys of residents appear to be capturing the actual conditions of a location filtered through the various psychological attributes and psychological processes of residents. In fact, one study by Taylor (1995a) finds that up to 90% of the variation in residents' perceptions of ecological conditions may be psychological rather than ecological and that "personal differences contribute more to perceived signs of incivility than do differences between locations" (Taylor, 1995b:11). In addition, researchers have theorized that in high-disorder neighborhoods, residents may not take notice of changes in disorder because they are confronted with many troubling or disorderly conditions (Taylor, 1997a).

Overall, we suggest that some previous studies of street-block behavior in the ecology of crime tradition have several limitations. First, measures of the beliefs and behavior of residents on street blocks have often been inferred from their demographic characteristics or from neighborhood or other aggregate measures rather than from self-reports from residents and place users at the specific unit of analysis under study. Second, some studies have relied upon residents' assessments of the disorder on their street or in their neighborhood, with little appreciation that the majority of the variation found is between *people* and not between *places*. Our research attempts to deal with these two basic shortcomings by drawing from both interviews with place managers and on-site observations to assess changes in street-block behavior.

## SURVEY OF PLACE MANAGERS

The first data source is interviews with 398 "place managers" living or working on the 100 target street blocks in our study at the end of the five-month experimental intervention period.<sup>7</sup> We define the place managers

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7. Funds were only available to conduct one wave of place manager interviews.

in our study as those people who live or work near problem places and who, by virtue of their proximity and interests, may have primary or personal responsibility to the street block (see Eck and Wartell, 1998; Felson, 1995b). The place managers in our sample included residents (71%) and managers or owners of stores on the study blocks (21%). The survey sought to examine place manager self-reports of their specific involvement in controlling the drug problem on their block, the actions they had taken recently to remedy the problem, their feelings of community cohesion, their perceptions of security on the street block, their specific assessments of recent police intervention efforts, and their feelings of fear of crime.

We attempted to include 400 face-to-face interviews at the 100 sites in our study (4 interviews per site). Place managers were selected using the following criteria: We interviewed residents living on the target blocks who complained about drug activity on the block, owners or managers of commercial establishments on the block, and school superintendents or other people working on the block who might have a stake in controlling drug activity on the block. If fewer than four people were identified per block using these primary selection criteria, the interviewers were instructed to interview the residents across the street from the problem location and residents on either side of the target location—moving away no farther than the end of the face block if no one was home at these residences after four attempts. A total of 398 interviews were conducted during February and March 1996.

Of the 398 place managers interviewed, nearly half of the respondents were African-American and 21% were white; the median number of months living or working at their current location was about six years; 52% of the respondents were male; and the mean age of respondents was 47 years. There were no significant differences between the responses given by the resident and store owner/manager place managers on measures of place manager demographic characteristics, feelings of fear of crime, and perceptions of cohesiveness. There were, however, slightly more business store owners or managers who knew about the Beat Health Program than residents. Business store owners and managers were also more likely to take their own initiative in solving problems on the block than residents ( $p < .05$ ).

The place manager respondents were not drawn from a random sample of a population of place managers. Rather, a purposive sample was utilized in order to better capture how street blocks were viewed from the perspective of place managers who had a stake in the area, worked in the

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As such, we do not have effective measures of change in the actions, attitudes, and perceptions of place managers in response to the intervention efforts.

area, or lived in the area (see Rosenbaum and Lavrakas, 1995). The interviewers for the study were highly trained census workers on temporary furlough due to a budget stalemate in Washington, D.C., in early 1996. An on-site supervisor verified each interviewer's first five interviews and verified 20% of their interviews thereafter by calling or visiting the respondent. Interviewers were not aware of the allocation status (control or experimental) of any location.

The unit of analysis in our study was the street block. Thus, the results of the place manager survey were aggregated by site ( $n=100$ ). The aggregated results of the place manager survey were matched to the results of the on-site assessments of the street blocks (see later) on a case-by-case basis. Several scales were then constructed from the place manager survey to enable examination of various theoretical constructs.

#### PLACE MANAGER INDIVIDUAL ACTION SCALE<sup>8</sup>

The items that make up this scale are presented in Table 1. This scale was constructed to capture the specific actions (e.g., calling 911) taken by individual place managers against problems at the target location (see Eck, 1994; Felson, 1995b). In effect, this scale is a measure of those actions taken by individuals in direct response to antisocial behavior. The scale was included in the analysis to determine if individual actions on the part of place managers had an impact on changes in the amount of drug dealing, the level of disorder, and signs of civil behavior in public places on the street blocks in our study.

Table 1. Place Manager Individual Action Scale ( $N = 398$ )

Variable	Percent
Called 911 About the Target	15.6
Called the Drug Hotline About the Target	12.1
Talked to Owner/Manager About Problems at the Target	7.8
Talked to Tenants About Problems at the Target	8.3
Confronted Offenders at/about Target	8.8
Called a City Agency About Target	10.8
Did Something on their Own About Target	8.0
<i>Cronbach's Alpha</i>	0.77

8. The individual action scale was derived by summing the seven items described in Table 1 and dividing by seven. The scale ranges from 0 to 1, where higher values represent more individual actions taken on a study block and lower values represent fewer individual actions taken on a study block.

PLACE MANAGER COHESIVENESS SCALE<sup>9</sup>

The items that make up this scale are presented in Table 2. This scale was designed to represent the reported cohesiveness of the street block, and it also reflects a similar construct introduced by Taylor (1996b), which he calls "resistance." Other researchers have alluded to this type of measure in arguing that a more cohesive group of residents will "stick up" for each other and engage in informal social control when the norms of the street block are being violated (Greenberg and Rohe, 1986; Hirshfield et al., 1996; Sampson et al., 1997; Taylor, 1988, 1995c, 1996b; Taylor and Gottfredson, 1986; Taylor and Harrell, 1996; Taylor et al., 1984).

Table 2. Place Manager Cohesiveness Scale (N = 398)

Variable	Percent
Believe Neighbors on Street Help Each Other Rather Than Go Their Own Way	34.4
Believe Neighbors on Street Will Call City to Ask for Help Dealing with Problems	56.6
Believe Neighbors Will Intervene and Ask a Youth Spray Painting Graffiti to Stop	51.3
<i>Cronbach's Alpha</i>	0.81

Table 3. Place Manager Collective Action Scale (N = 398)

Variable	Percent
Met with Community Group About Problems	17.6
Attended a Community Fair	3.3
Attended a Drug Rally, Vigil, or March	1.0
Participated in Neighborhood Clean-up	8.3
Participated in Citizen Patrols	1.8
Participated in Organized Observations of Drug Activity	4.0
Participated in Neighborhood or Block Watch Programs	8.8
Attended Landlord Training	2.5
Worked with the Police About the Target	14.8
Worked with Community Group Concerning Target	11.8
<i>Cronbach's Alpha</i>	0.79

9. The cohesiveness scale was derived by summing the three items described in Table 2 and dividing by three. The scale ranges from 0 to 1, where higher values represent more cohesiveness on a study block and lower values represent less cohesiveness on a study block.

PLACE MANAGER COLLECTIVE ACTION SCALE<sup>10</sup>

The items that made up this scale are presented in Table 3. This scale was designed to tap into the collective involvement of residents and place managers in their community. Buerger (1994) argues that the greatest challenge of community-oriented policing is to motivate the community to become involved in partnerships designed to solve community-based problems. This measure was included in the analysis to determine if place manager involvement in the community had an impact on the amount of drug dealing and disorder change. The measure was also included to determine if changes in street conditions were related to the involvement of residents and place managers on their street as well as in the larger community.

FEAR/AVOIDANCE SCALE<sup>11</sup>

The items contained in this scale are presented in Table 4. This measure was included in the analysis to determine if fear of crime, which has been found to restrict the level of resident intervention and alter residents' perceptions of their environment (Bursik and Grasmick, 1993; Greenberg and Rohe, 1986; Perkins and Taylor, 1996; Taylor, 1995c, 1996a; Taylor and Harrell, 1996; Taylor et al., 1984), had an impact on the dependent variables examined. This variable was also added to the analysis to control for its possible confounding effects on resident perceptions and behavior.

Table 4. Fear/Avoidance Scale ( $N = 398$ )

Variable	Percent
Feel Less Safe After Dark	12.8
Feel Less Safe During the Day	13.8
Never/Seldom Park on the Street	46.5
Never/Seldom Walk in the Neighborhood	39.9
Never/Seldom Visit a Neighborhood Park	79.4
Never/Seldom Talk to Neighbors	35.1
<i>Cronbach's Alpha</i>	0.66

10. The collective action scale was derived by summing the 10 items described in Table 3 and dividing by 10. The scale ranges from 0 to 1, where higher values represent more collective actions taken on a study block and lower values represent fewer collective actions taken on a study block.

11. The fear scale was derived by summing the six items described in Table 4 and dividing by six. The scale ranges from 0 to 1, where higher values represent greater levels of fear on a study block and lower levels represent lower levels of fear on a study block.



## SURVEY RESULTS

Overall, our survey results show that 24% of all respondents took some type of direct, individual action during the intervention period. The most common type of individual action taken was calling the police using 911 (16%). About 32% of the residents reported that they were involved in collective community activities; the most common type of community activity was meeting with a community group (18%). About two-thirds of the place managers were fearful of walking alone at night on their block, and only one-third believed that their neighbors on their street help each other rather than go on their own way.

When we aggregated these frequencies for individual place managers to the street-block level of analysis ( $n=100$ ), we found that 75% of the street blocks had at least one place manager who took some type of direct action during the experimental intervention period. About half (48%) of the street blocks had at least one place manager who reported calling the police using 911. About 73% of the street blocks had at least one place manager who reported being involved in community activities; the most common type of community activity was meeting with community groups, followed by neighborhood clean-up projects and neighborhood or block watch activities. The vast majority (90%) of street blocks had at least one or more place managers who stated they were fearful of walking alone at night on their block. Seventy-one percent of street blocks had at least one place manager who believed that most neighbors on the street helped each other rather than going their own way.

## ON-SITE OBSERVATIONS

The second data source (our outcome data) is on-site observations of the social and physical conditions of the 100 street blocks in our study. Our research supports and extends prior research that uses on-site rating by trained researchers in order to capture the "ecological" changes in the neighborhood or street. We conducted two on-site observations of each street block as each case was randomly allocated to either the experimental or control group (before). We then conducted two observations of each street block five months later (after). Structured observations of routine licit activity (e.g., pedestrians, children playing, people coming in and out of businesses), illicit activity (e.g., drug dealing, loitering, urinating in public), litter, graffiti, trash, traffic, and presence of law enforcement and security personnel were made of each face block surrounding the 100 problem locations. These observations were conducted during two of four randomly selected time periods (11 a.m. to 2 p.m., 2 p.m. to 5 p.m., 5 p.m. to 8 p.m., 8 p.m. and 11 p.m.), both before the start of the intervention at each site and again at the end of the intervention period at each site five

months later. Trained observers made 400 on-site visits to the experimental and control site (200 before and 200 after).<sup>12</sup>

Our decision to conduct two observations per street block per period derived from our understanding that street blocks have standing patterns of behavior, or rhythms of recurring behavior and activity, that are somewhat predictable and routine (Taylor, 1988, 1997b). Felson (1995a) also suggests that activities occur in fairly predictable rhythms where patterns of behavior are dictated by a host of factors, including individual people's working hours, sleeping times, and recreational times.

On-site observations of social activity can be conducted for either a sample or a census of a street's activity rhythms. For example, if a street block has a constant standing pattern of behavior (or just one activity rhythm) across all minutes of an hour, across all hours of a day, and across all days of a week, one could reasonably assume that conducting one on-site observation of social activity at any time of the day and on any day of the week would adequately capture the true social activity patterns of that street block. In this extreme case, one could argue that consideration of sampling error is not a concern because one observation would be representative of the population of social activity patterns ( $n=1$ ) for that street block. Alternatively, if a street block is characterized by various standing patterns of behavior, where for example, morning activity is different from afternoon activity, which is then different from evening and nighttime activity, one could conclude that there are at least four standing patterns of behavior on that particular street block.<sup>13</sup> In this type of situation, the total population of standing patterns of behavior is quite small ( $n=4$ ), and if one were to draw a sample of time periods of social activity that is quite large (e.g.,  $n=2$ ) relative to the size of the population of time periods of social activity (e.g.,  $n=4$ ), the standard error may not be as problematic as expected (see Blalock, 1979; see also Rosenbaum and Lavrakas, 1995; Weisburd and Green, 1991). Indeed, Rosenbaum and Lavrakas (1995:296) conclude that the size of the population is not always associated with the stability of estimates.

We also suggest that the reliability and validity of on-site observations increase as the unit of analysis decreases. We propose that street blocks and other small units of analysis (e.g., hot spots, public housing common

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12. Randomly selected observation periods were generated for the before period. The "after" period observations then used the same time period allocations per site to ensure consistency between the before and after observations. On-site observers did not know which street blocks were in the experimental group and which ones were in the control group. Two coders entered scores for each block and came to an agreement of the scores to generate the measures in this study.

13. This example would assume constant variation of social activity between weekends and weekdays as well as across the four seasons.

areas) have fewer and less-complex patterns of street activity (or standing patterns of behavior) than neighborhoods, communities, or other larger units of analysis that have more complex and varied patterns of social behavior. For example, a street block may have just two standing patterns of behavior, where daytime activity is characterized by people coming and going from the stores on the block and evening activity is characterized by drug dealing on the street corners. This kind of predictability in the standing patterns of behavior on a street block rarely exists for neighborhoods, for a number of reasons: (1) the absolute number of people frequenting a neighborhood makes it more difficult to anticipate standing patterns of behavior; (2) the range of land-use patterns across a neighborhood (businesses, single-family homes, multidwellings) creates more complex rhythms of social activity; and (3) the diversity of people living and working in neighborhoods leads to more complex and diverse patterns of social behavior.

We conducted two on-site observations of the 100 street blocks in our study both before the case was assigned to the Beat Health Unit and five months after the start of the Beat Health intervention.<sup>14</sup> The average of the two observations before and after the intervention was used as the count of people involved in the various types of activity before and after the intervention. For example, if two people were observed selling drugs on a target street block between 2 p.m. and 5 p.m. before the intervention and four people were observed selling drugs on the same target street block between 8 p.m. and 11 p.m., also before the intervention, we counted three people as selling drugs before the intervention in that particular target street block. The raw "before" score was regressed onto the raw "after" score to generate a residual gain score (see Bohrnstedt, 1969; Bursik and Webb, 1988; Cronbach and Furby, 1970) and to enable analysis of the amount of change occurring during the course of the intervention. This procedure allows for identification of changes in a street-block characteristic (e.g., drug dealing, signs of disorder, or signs of civil behavior in public places) over and above what one would expect taking into account the baseline observation. As such, positive (or greater) scores of a "difference" variable indicates more than expected of a particular social characteristic (e.g., more drug dealing) after the intervention and negative (or lower) scores of a "difference" variable indicate less than expected of a particular social characteristic after the intervention. Table 5 provides summary data of the study variables.<sup>15</sup>

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14. The average intervention time for the Beat Health program is five months (see Green, 1996).

15. The multicollinearity test (tolerance) for the three models in the study suggests that the variables are theoretically as well as empirically distinct constructs. The correlation matrix can be found in the appendix. Several diagnostics were performed to

Table 5. Descriptive Statistics For All Study Variables

Variable Description	Mean	S.D.	Range	Skewness*
Control (0) or Experimental (1)	0.50	0.50	0 - 1	0.00
Residential (0) or Commercial (1)	0.14	0.35	0 - 1	2.11
Fear (Scale 0 - 1)	0.38	0.15	0 - 1	0.22
Percent Female	0.48	0.28	0 - 100	0.07
Percent African-American	0.45	0.33	0 - 100	0.16
Percent Resident	0.71	0.33	0 - 100	-0.83
Months at Current Location	133.61	84.57	16.25 - 399.00	0.81
Number of Properties on Block	18.11	11.65	3 - 56	0.24
Collective Action (Scale 0 - 1)	0.07	0.08	0 - 1	1.58
Individual Action (Scale 0 - 1)	0.10	0.11	0 - 1	1.90
Cohésiveness (Scale 0 - 1)	0.47	0.27	0 - 1	-0.02
Disorder Scale	-0.82	1.99	-5 - +4	0.11
Drug Dealing	-0.16	0.81	-4 - +1	-3.15
Public Signs of Civil Behavior	-0.31	1.47	-6 - +3	-0.89

\* Measure of the asymmetry of a distribution. Positive skewness indicates that the more-extreme values are greater than the mean, and negative skewness indicates that the more-extreme values are less than the mean.

## RESULTS

Our study sought to explore the impact of place managers on changes in the levels of drug dealing, signs of disorder, and signs of civil behavior in public places on 100 targeted street blocks. Several control variables were introduced into the models. First, dichotomous variables indicating whether the site was a control or experimental site and whether the site was residential or commercial were introduced to explore whether these variables had an impact on the change in social activity on the block. These variables were entered into the analysis to control for the effects of the different interventions that occurred at the sites (control versus experimental) and any differential impact at commercial versus residential locations. We would expect that the experimental sites, where the Beat Health officers sought to build working relationships with the place managers, would be predictive of greater change in the levels of drug and disorder problems than any observed changes at the control sites. We also hypothesized that the commercial properties could be affected more than the residential properties for two reasons. First, since most of the residential properties were rental units, we expected less change. Second, since the commercial properties were, on average, more valuable properties, we expected the property owners to be more responsive to crime control efforts (see also Green, 1996).

Second, a series of aggregated demographic variables for the place managers on each block were introduced into the model to control for any effects related to the gender and racial mix of the respondents, whether the respondents were primarily residents on the street block or had businesses on the block, and the average length of time the place managers had lived or worked on the block. We also controlled for the number of properties on each street block. The results of the first regression model predicting the observed changes in signs of disorder are presented in Table 6.<sup>16</sup>

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ensure the integrity of the three models presented. First, plots of the standardized and unstandardized residuals were examined. The plots for the model reporting changes in disorder reveal no outlier cases. The plots for the model reporting changes in drug activity reveal two possible outlier cases. All coefficients remain stable when the two possible outliers are removed from the analysis, except cohesiveness, which drops slightly in the level of significance. The plots for the model reporting changes in civil behavior reveal one possible outlier case. The model coefficients, however, remain stable when the outlier case is removed. Second, we examined the Cook's *D* statistics for each of the three models included (analysis for all 100 cases in the study). The Cook's *D* statistics for the disorder model ranged from 0 to .136 (mean of .012); the Cook's *D* statistics for the drugs model ranged from 0 to .246 (mean of .011); the Cook's *D* statistics for the civil behavior model ranged from 0 to .285 (mean of .013) (see Fox, 1991).

16. The disorder scale was derived by adding on-site ratings of (a) litter and broken glass, (b) trash or junk, (c) cigarette butts, (d) needles and drug paraphernalia, (e)

Table 6. OLS Regression Results for Changes in Signs of Disorder

Variable Description	B	Standardized B	S.E.
Control (0) or Experimental (1)	-0.615*	-0.204	0.291
Residential (0) or Commercial (1)	0.271	0.062	0.509
Fear (Scale 0 – 1)	-0.237	-0.024	1.033
Percent Female	0.294	0.055	0.584
Percent African-American	-0.408	-0.089	0.505
Percent Resident	-0.437	-0.095	0.612
Mean Number of Months at Current Location	0.001	0.049	0.002
Number of Properties on Block	0.032*	0.248	0.014
Collective Action (Scale 0 – 1)	-7.621*	-0.445	2.113
Individual Action (Scale 0 – 1)	4.077*	0.298	1.706
Cohesiveness (Scale 0 – 1)	-0.076	0.013	0.616
Constant	0.126		0.763

$R^2 = .22$

Significance of  $F = .02$

\* Significant at  $p < .05$  (one-tailed test).

As Table 6 shows, the variable that is most predictive of change in the signs of disorder at the 100 street blocks was the scaled measure "collective action" (explains 44% of variation). As discussed above, this measure was a composite measure of self-reported place manager involvement in community activism (meeting with community groups, attending drug rallies, neighborhood clean-ups, citizen patrols, block watch group activities). The more collectively involved the place managers reported they were, the greater the observed decreases in signs of disorder on the street block. Conversely, our results show that the more individual action taken by the place managers to resolve problems on their block (e.g., calling 911), the more disorder was found after the intervention ( $p < .05$ ). Interestingly, the more properties on the block, the less decrease in signs of disorder. We expect that this result is because smaller blocks could be cleaned up more quickly than larger blocks.

Table 6 also shows that the experimental sites had a significantly greater decrease in signs of disorder than the control sites. Our study does not,

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empty beer or liquor bottles, and (f) graffiti on the street block. The outcome measure used in this analysis uses unstandardized residualized difference scores (see Bohrnstedt, 1969; Bursik and Webb, 1988; Cronbach and Furby, 1970).

Interactions were examined across several key independent variables in our models (treatment, cohesion, individual actions, collective actions, and fear). None of these interaction terms was significant for the three models included in this study (both for the models with the outliers included as well as with the outliers excluded).

however, disentangle which of the array of Beat Health program tactics contributes most to reductions in signs of disorder.

The results of the tobit regression model examining changes in the number of males selling drugs on the target street blocks are presented in Table 7.<sup>17</sup> As this table shows, whether the site was in the control or experimental group and self-reported levels of community cohesiveness were significantly more likely to be associated with change in the number of males selling drugs on the target street blocks.

Table 7. Tobit Regression Results for Changes in Males Selling Drugs

Variable Description	B	S.E.
Control (0) or Experimental (1)	-0.429*	0.149
Residential (0) or Commercial (1)	-0.241	0.261
Fear (Scale 0 – 1)	-0.248	0.530
Percent Female	0.252	0.299
Percent African-American	0.157	0.259
Percent Resident	-0.022	0.314
Mean Number of Months at Current Location	0.000	0.001
Number of Properties on Block	0.001	0.007
Collective Action (Scale 0 – 1)	0.355	1.083
Individual Action (Scale 0 – 1)	-1.127	0.874
Cohesiveness (Scale 0 – 1)	-0.769*	0.316
Constant	0.606	0.391

\* Significant at  $p < .05$  (one-tailed test).

Our results show that the experimental street blocks were more likely to show decreases in the number of males selling drugs relative to the control street blocks from before the start of the intervention to afterwards ( $p < .05$ ). We also find that those street blocks with greater levels of

17. No females were observed selling drugs either before or after the intervention. The drug-dealing measure is a single-item measure captured through the social observations. The drug-dealing outcome measure used in this analysis uses unstandardized residualized difference scores. The drug-dealing variable does not exhibit a normal distribution. As one would expect for any type of criminal event, there are many blocks where drug dealing was not observed ( $n=84$  blocks did not have any drug dealing observed either before or after the intervention). As such, tobit analysis was used for this particular variable because it is appropriate for restricted (limited) interval-level dependent variables where one value includes a very large portion of cases (see Baba, 1990; Tobin, 1958; Wooldredge and Winfree, 1992). Indeed, “the Tobit Model is designed to handle criterion variables that assume some value with a high probability and are continuously distributed beyond this point with the remaining probabilities” (Baba, 1990:428). Importantly, using a tobit analysis did not change the substantive results demonstrated by using an ordinary least squares model.

reported community cohesiveness (i.e., where the place managers reported that their neighbors on their street block would help each other, call the city to help them solve problems on their block, and intervene when youth were acting in an antisocial manner) were more likely to show decreases in the number of males selling drugs on the street block ( $p < .05$ ). This result is consistent with Taylor's (1997a) finding that where street blocks have higher levels of in-built resistance, the ability to have an impact on the street block is greater (see also Sampson et al., 1997).

Our results also show that when residents act in individual ways to solve street problems (e.g., calling 911) it appears to be an ineffective way to deal with street-block problems. Indeed, our nonsignificant results of individual actions reflect this explanation.

The results of the regression model predicting changes in signs of civil behavior in public places,<sup>18</sup> as measured by the number of females engaging in positive behavior (e.g., walking on the block, going in and out of businesses), are presented in Table 8.

As this table shows, the variable that is most predictive of change in signs of civil behavior in public places on the 100 street blocks was the scaled measure "collective action" (explains more than 26% of variation). As discussed above, this measure was a composite measure of self-reported place manager involvement in community activism (meeting with community groups, attending drug rallies, neighborhood clean-ups, citizen patrols, block watch group activities). The more involved the place managers said they were, the greater the observed increases in signs of civil behavior on the street block.

Table 8 shows that the experimental street blocks also had more signs of civil behavior in public places after the interventions relative to the control street blocks ( $p < .05$ ), and that the commercial blocks in the study showed more signs of civil behavior in public places after the intervention ( $p < .05$ ). Importantly, we find that the less fearful the respondents were on the block, the more signs of civil behavior in public places after the intervention ( $p < .05$ ). Consistent with the vast body of criminological literature (see, e.g., Bursik and Grasmick, 1993; Greenberg and Rohe,

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18. The public signs of civil behavior measure is a single-item measure captured through the social observations. The number of female pedestrians, females going in and out of businesses, and stopping to talk on the street represent our proxy measure of public signs of civil behavior. The public signs of civil behavior outcome measure used in this analysis uses unstandardized residualized difference scores. A negative value for the public signs of civil behavior outcome measure means that, based on time 1 predictions of time 2, there are fewer public signs of civil behavior after the intervention. Conversely, a positive value on the public signs of civil behavior outcome measure means that, based on time 1 predictions of time 2, there are more public signs of civil behavior.



1986; Perkins and Taylor, 1996; Taylor, 1995c, 1996a; Taylor and Harrell, 1996; Taylor et al., 1984), this finding suggests that blocks where people are less fearful are more apt to engage in collective problem solving.

**Table 8. OLS Regression Results for Changes in Signs of Civil Behavior in Public Places**

Variable Description	B	Standardized B	S.E.
Control (0) or Experimental (1)	0.451*	0.164	0.261
Residential (0) or Commercial (1)	0.938*	0.237	0.457
Fear (Scale 0 – 1)	-1.961*	-0.214	0.927
Percent Female	0.646	0.131	0.524
Percent African-American	-0.486	-0.116	0.453
Percent Resident	-0.484	-0.115	0.549
Mean Number of Months at Current Location	-0.001	-0.081	0.002
Number of Properties on Block	0.004	0.033	0.012
Collective Action (Scale 0 – 1)	4.111*	0.263	1.896
Individual Action (Scale 0 – 1)	-0.253	-0.020	1.531
Cohesiveness (Scale 0 – 1)	-0.268	-0.052	0.552
Constant	0.596		0.685

R<sup>2</sup> = .25

Significance of F = .01

\* Significant at *p* < .05 (one-tailed test).

## DISCUSSION AND CONCLUSION

Our study explored the role of place managers in controlling drug and disorder problems on 100 street blocks in Oakland, California. We used self-reports of place managers' individual actions, their collective involvement in neighborhood crime prevention activities, their fear of crime, and their perceptions of community cohesiveness to examine the role of place managers in changing the social and physical conditions of street-block activity within the context of a randomized field trial in Oakland. Fifty street blocks were randomly assigned to the Oakland Police Department's civil remedy program ("Beat Health") that attempts to build working relationships with residents and place managers, uses citations for building, health, sewer, sidewalks, and rodent control code violations, draws on drug nuisance abatement laws, and coerces third parties (such as property owners, apartment superintendents, and business owners) to clean up blighted and drug nuisance places. These "treatment" sites were compared to 50 control sites that received traditional enforcement efforts, such as surveillance, arrest, and search warrants. Independent observations of

the changes in the social and physical conditions of the 100 street blocks were conducted and used as our outcome measures.

We found that the level of place managers' collective involvement in community activism is associated with decreases in signs of disorder and with increases in levels of signs of civil behavior in public places on the street blocks in our study. Levels of perceived street block cohesiveness were found to play a significant role in decreases in males selling drugs. We also found that the experimental street blocks targeted by the Oakland Police Department's Beat Health program were also places that evidenced decreases in signs of disorder, decreases in males selling drugs, and increases in signs of civil behavior in public places.

Individual, direct actions (e.g., calling 911) taken by place managers in an attempt to solve problems at specific target locations were not associated with decreased levels of social and physical disorder on the street blocks. We also found inverse relationships between fear and other place manager actions: increased fear of crime was associated with lower levels of collective action, individual action, and cohesiveness.

Interaction effects between the treatment variable and other selected variables (such as cohesion, collective action, individual action, and fear) were not significant. The failure to observe significant interaction effects in these data suggests that while place managers' activities (particularly collective problem-solving activities) play a significant role in decreasing drug and disorder problems, the programmatic efforts of the Beat Health Unit independently affect changes in drug and disorder problems on street blocks. This result suggests that specific, short-term program efforts (such as sending property owners warning letters, enforcing property code violations, evicting tenants) contribute to the observed decreases in drug and disorder activity. As such, our results indicate that police efforts to reduce drug and disorder problems can be effective independent of the existing social climate on a street block. Conversely, our results also point to the importance of effective place management in controlling drug and disorder problems, independent of police efforts to solve street block problems.

Our results suggest that place managers may be most effective in dealing with drug and disorder problems on their street blocks when built-in resistances exist on street blocks and when place managers engage in collective community activism (Sampson et al., 1997; Taylor, 1996b). Our results indicate improvements in drug dealing and disorder conditions when place managers work collectively with their neighbors rather than when they react as individuals (e.g., calling 911) to specific problems on their block. Individual actions—such as calling 911, calling the police drug hotline, talking to the owner or tenant from the target, or directly calling a city agency to respond to the specific problem location—were not associated with reductions in signs of disorder or the number of males selling drugs.

This may be because these types of individual actions are typically reactive in nature and represent solo crime control activities and, therefore, may have minimal ability to control problems in the long run. By contrast, the collectively based activities of place managers are indicative of more integrative and longer-term commitments to controlling street-block problems and were related to decreases in signs of disorder, decreases in males selling drugs, and increases in signs of civil behavior in public places.

Our results have several important theoretical and policy implications. First, our research suggests that place managers play an important role in controlling drug and disorder problems. Moreover, there is evidence to suggest that place managers may be most effective when they are more socially integrated with their neighbors on their street block and when they are involved in collective, rather than individual, problem-solving efforts. The apparent significance of collective crime control activities has several implications for the civil remedy program of the Beat Health Unit in particular and police problem-solving activities in general. First, encouraging citizens to simply call the police (or other city agencies) about problems may have a backfire effect: This type of individual "solution" to the problem may inhibit rather than enhance the ability of place managers on a street block to be effective in solving problems in the long run. Place managers who simply call the police (and expect the police to deal with the problem) may be less effective than place managers who seek a solution that is grounded in group-based problem-solving activities. Second, police efforts that build working relationships with a core group of place managers may have a greater likelihood of long-term success than the police building one-on-one working relationships with individual place managers. Efforts to strengthen collective neighborhood actions among place managers may also work to lessen fear and thus place further obstacles in the "spiral of decline."

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Appendix. Correlation Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Control/Experimental	1.00												
2. Commercial/Residential	0.00	1.00											
3. Fear Scale	0.10	0.07	1.00										
4. Percent Female	-0.02	-0.14	0.01	1.00									
5. Percent African-American	0.03	-0.16	-0.23*	0.26*	1.00								
6. Months at Current Location	0.04	-0.02	0.05	0.18	0.32*	1.00							
7. Number of Properties	-0.12	-0.28*	-0.08	0.08	0.22*	0.18	1.00						
8. Collective Action	-0.09	0.11	-0.12	0.09	0.06	-0.04	0.03	1.00					
9. Individual Action	-0.12	0.02	-0.13	0.04	0.13	-0.16	-0.04	0.59*	1.00				
10. Cohesiveness	-0.07	-0.03	-0.29	0.26*	0.19	0.07	0.15	0.32*	0.15	1.00			
11. Disorder	-0.23*	0.01	-0.02	-0.00	-0.01	0.03	0.20	-0.22*	0.07	-0.04	1.00		
12. Drug Dealing	0.22*	0.12	0.04	-0.08	-0.05	-0.07	-0.05	0.11	0.16	0.20	-0.12	1.00	
13. Civil Behavior	0.12	0.31*	-0.16	0.02	-0.09	-0.12	-0.10	0.30*	0.17	0.06	0.03	0.02	1.00

\*  $p < .05$  (two-tailed test).

