

Systematic Observations of Neighborhood Order: Assessing the Methodology in Evaluating a Community-based Initiative

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Harvey, L.K., Di Luca, K.L., Hefner, M.K., Frabutt, J.M., Shelton, T.L. (2013). Systematic Observations of Neighborhood Order: Assessing the Methodology in Evaluating a Community-based Initiative. *Journal of Applied Social Science*, 7(1), 42-60. doi: 10.1177/1936724413478329

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Abstract:

A systematic pre- and postintervention neighborhood observation constituted one component of the evaluation of an initiative to eliminate a street-drug market. Analysis focused on multiple indicators of social and physical order and disorder, as well as physical decay. No noticeable changes were found, but variations in physical and social attributes between the market area and other segments of the neighborhood were revealed. These results suggest lessons that can be learned—and questions that should be considered—with regard to the application of the neighborhood observation methodology to an evaluation of this type of strategic, community-based initiative.

Keywords: observational research | evaluation | street-drug markets

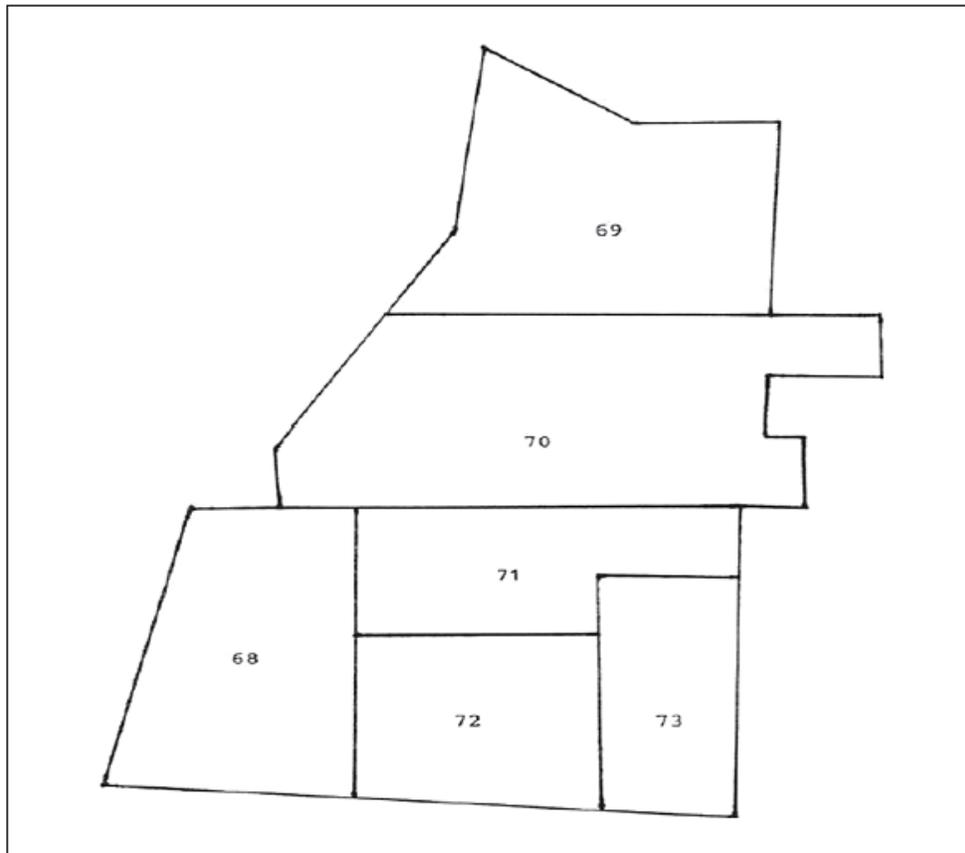
Article:

Introduction

Systematic observation of a neighborhood can yield important information about the quality of life in a community. Rigorous, controlled observation of ecological settings strongly complements other assessments and indicators such as surveys, archival data, and census tract sociodemographics (Raudenbush and Sampson 1999). With these goals in mind, a pre- and postintervention neighborhood observation was included as one component of the process/outcome evaluation of an initiative to eliminate a street-drug market. Observational results were intended to enhance understanding of how implementation of the strategy affected the quality of life, as indicated by physical and social features of the target neighborhood. This article documents the complexities of implementing this methodology, to focus on the lessons learned and the issues raised when neighborhood observation was used to evaluate a community-based

initiative. Thus, hopefully, it provides useful guidance to other researchers involved in designing similar evaluation projects.

Figure 1. Outline of neighborhood map showing Fire Demand Zones



The neighborhood in this project is about 3 city blocks wide and 12 blocks long, located approximately 1.5 miles from the city's downtown. Figure 1 shows the outline of the neighborhood and its division into Fire Demand Zones (FDZs), the smallest reporting areas used by the city's fire and police departments. A public housing property with one- to four-bedroom apartments covers about 16 acres near the southern end of the neighborhood, and a privately owned apartment complex sits near the center of the neighborhood, 2 blocks north of the public housing area. The drug market operated primarily within the boundaries of the public housing property and between it and the apartment complex to the north, in FDZs 72 and 71, respectively.

Commercial properties and single-family dwellings face the southern boundary of the neighborhood. For a few blocks near the western boundary, commercial properties proliferate, but single-family houses are the rule in the rest of the neighborhood. At the time of the intervention, three-fourths (76 percent) of the housing units were renter occupied, 13 percent were owner-occupied, and 11 percent were vacant.

Median income levels in the neighborhood were \$12,175 per household and \$7,227 per capita. Almost all of the neighborhood's residents were black (94 percent), while small proportions were white (2 percent) or Hispanic (3 percent).

The street-drug market in this neighborhood has a long history, having been the target of numerous sweeps by the police department over a 20-year period. The latest intervention was part of a multistage strategy involving community and law-enforcement collaboration, based on the focused deterrence or "pulling levers" framework (Kennedy 1997). This framework views offenders as rational actors, who will agree to discontinue criminal activity when presented with (1) overwhelming evidence against them, (2) community intolerance of crime, and (3) support services that can lead to lawful opportunities as an alternative to arrest and prosecution.

In the first stage, crime data analysis and crime density maps from across the city were used by the police to determine the neighborhood with the highest rates of drug-market activity and violent crimes, and hence the market on which to focus the strategy. Results of the analysis, and goals and components of the strategy were shared in meetings with members of a local university-community partnership, leaders of the faith community, the housing authority, community-based organizations, and neighborhood residents. With the police-community collaboration established, the police identified the locations and individuals central to the market and conducted surveillance and undercover drug buys, while community members worked toward securing resources to be offered to drug dealers as an alternative to involvement in criminal activity. Once police investigations were completed, identified dealers and their families were visited by a three-member team of a police officer, a minister, and a community resident. The team informed them of the investigation and invited them to a meeting at which cases against the dealers would be revealed, and an alternative to arrest and prosecution would be offered by community members and organizations. A letter from the police chief reiterated the need to attend the "notification" or "call-in," promising that they would not be arrested at the meeting, but that they must stop dealing drugs.

The notification took place at the police department in March 2005, and the neighborhood observations that are the focus of this article occurred in November 2007 and April 2008. Criminal activity in the area had been tracked after the notification to determine whether the elimination of the market and the reduction in related violence had been sustained. Although the street-drug market had been severely curtailed by the implementation of the strategy, monitoring of crime in the neighborhood indicated a revival of the market by 2007, so the police department initiated another intervention involving surveillance, drug buys, and arrests.

The methodology outlined here is a modified and scaled-down application of the systematic social observation protocol used in the Project on Human Development in Chicago Neighborhoods (Sampson and Raudenbush 1999). The observations were conducted before and after the police department intervened by arresting 30 individuals for drug-related offenses in the neighborhood where the strategic initiative described above had been implemented.

Measures

The major constructs assessed included physical order, physical disorder, physical decay, social order, and social disorder. These constructs were assessed via the indicators listed in Table 1 (adapted from Weisburd et al. 2004, 2006). Physical disorder was assessed using four items, physical order using two items, physical decay using three items, social disorder using five items, and social order using three items. Police patrols and police interaction with neighborhood residents were also noted, and space was provided on the data collection instruments for observers to note other items relevant to either physical or social order/disorder. All items were assessed on a dichotomous scale indicating presence or absence, and some were counted for the purpose of indicating frequency.

The geographic unit of analysis for the observation was a city block face—the block segment on one side of a street (Sampson and Raudenbush 1999). In this procedure, each intersection of two streets marks the end of one block face and the beginning of another. An individual identification number and a corresponding coding sheet were designated for each block face.

Table 1. Neighborhood Constructs and Indicators

Construct	Indicators
Physical disorder	Trash/garbage/litter on sidewalk/street/gutter/common areas Residence with trash/garbage/litter in yard Structures marked with graffiti Abandoned cars
Physical order	Signs restricting access, documenting rules, or indicating neighborhood watch Buildings with graffiti painted over
Physical decay	Burned out or boarded or abandoned houses Burned out or boarded or abandoned commercial buildings Buildings with broken windows
Other physical indicators	Note any indicator observed in an intersection or in the middle of the street, or any other physical attribute that may be of interest.
Social disorder	Individuals congregating with verbal conflict Individuals congregating with physical conflict Potential drug transaction activity Potential prostitution activity Loud noise/music
Social order	Individuals congregating, no observable conflict Residents on porches Individuals out in the neighborhood
Other social indicators	Police patrol Police interaction Note any indicator observed in an intersection or in the middle of the street, or any other social attribute that may be of interest.

Procedures

Two pilot tests of the methodology were conducted, beginning at 4:00 p.m. on Friday, June 1, and 12:00 p.m. on Friday, September 21, 2007. Prior to the first pilot, the research team met to review the coding instruments and the operational definitions; to identify variables to be coded as “present” and assigned a frequency value, as distinct from variables that would simply be recorded as “present”; and to discuss the driving route. The police department was notified of each scheduled observation.

Two researchers coded social indicators, and the other two coded physical indicators. All researchers observed the same block face at the same time, and the route was designed so that the opposing block faces could be observed within a short time frame. Social and physical indicators were recorded on separate sheets, numbered sequentially.

In the first pilot, a local YMCA Outreach “street worker” drove the research team through the neighborhood, using his personal vehicle so as to convey a familiar presence. A research team member also familiar with the layout of the neighborhood directed the driver on a systematic route. An audio recorder was used to capture the street names and numbers corresponding with the numbers of the block faces recorded on the coding sheets and other anecdotal commentary for later review.

The team drove slowly through the area, beginning with the periphery and moving to the main streets within the observation area. Due to time schedule constraints, the researchers concluded the pilot test after having observed 51 block faces, 51.5 percent of the total number of block faces in the target area.

A postobservation debriefing session and interobserver reliability calculations led to several decisions. Although the researchers agreed that there was little difficulty in observing and recording the indicators, there had been difficulty determining the best route and the assignment of numbers to block faces. A detailed street map of the area was deemed necessary, so that the team could plan a systematic route and assign block face numbers in advance.

For purposes of assessing interrater reliability, coding sheets were compared for like records. A point value of “1” was assigned to each item on each sheet that was recorded similarly as being either absent (no notes made) or present and (where applicable) observed with the same frequency. The category “Other” was not included in the calculation for this assessment, as its function was to capture any other social activity of interest for anecdotal inclusion or for discussion of indicator selections following the pilot.

The Social Disorder/Order/Other categories encompassed 10 indicators, excluding “other.” With 51 sample block faces, a total of 510 points would indicate that each variable on each block face was coded in exactly the same way on both coding sheets. Comparison of the sample coding sheets from the pilot resulted in a score of 494 points out of the possible 510, meaning that 96.86 percent of all indicators were recorded as being absent or present with the same frequency where frequency applied. However, in many cases, there was simply a lack of indicators present. In

cases where only 1 record indicated the presence of an indicator, presence was assumed and the point was not assigned. Overall, there were 32 records of indicators present across all block faces. Of these 32, 25 were recorded with a matching frequency, and in 7 cases, the frequency differed. Thus, indicators present were recorded by both observers at the same frequency in 78.13 percent of cases.

Of the seven cases where the records differed, six of them were in the variable category “individual child or adult out in the neighborhood.” A review of the definition of this variable by the researchers observing social indicators concluded that there was difficulty in categorizing people who appeared to be outside together: that is, a lady with two very small children in the same yard together, and/or two individuals walking down the street together, but not quite “congregating.” This discussion led to the recommendation of adding “hanging out” to the indicator “adults or juveniles congregating, no observable conflict,” resulting in a revised variable category: “adults or juveniles congregating or hanging out, no observable conflict.”

The Physical Disorder/Order/Decay/Other categories encompassed nine indicators, excluding “other.” With 51 sample block faces, a total of 459 points would indicate that each variable on each block face was coded in exactly the same way on both coding sheets. Comparison of the sample coding sheets from the pilot resulted in a score of 391 points out of the possible 459, meaning 85.19 percent of all indicators were recorded as being absent or present with the same frequency where frequency applied. Similar to the social indicator records, in many cases, there was simply a lack of indicators observed. In cases where only 1 record indicated the presence of an indicator, presence was assumed and the point was not assigned. Overall, there were 91 indicators that were recorded as being present across all block faces. Of these 91, 23 were recorded with a matching frequency, and in 68 cases, the presence and or frequency differed. Thus, indicators present were recorded by both observers as present and, where applicable, at the same frequency in 25.27 percent of cases.

Of the 68 cases where presence or frequency records differed, 48 (68.5 percent) were in the categories “trash/garbage/litter on sidewalks, streets and/or gutters” and “residence with trash/garbage/litter in yard” (28 and 22 differing records, respectively). There were 9 cases where records of “signs restricting access, documenting rules, or indicating neighborhood watch” differed, and between 1 and 4 cases where all other indicator records differed. Reasons for these differences likely include the following:

- The coding sheet for the pilot did not include “streets and gutter” in its description of the first physical disorder indicator pertaining to trash.
- One physical disorder recorder was riding in the front passenger seat with the other in the rear driver’s side seat with a view additionally occluded by the two recorders of social indicators sharing the rear seat on the passenger side.
- The recorder in the front passenger seat was also navigating the driving route.

The result of this discussion led to recommendations including the following:

- review and revision of operational definitions, including clarification of the amount of trash within a given space to constitute presence;
- seating for recorders of physical variables where they can observe the ground level more easily—possibly securing a van for future observations;
- development of training materials for observers; and
- a second pilot test of the observation methodology.

The observational methodology was piloted a second time during the afternoon of Friday, September 21, 2007. Prior to this observation, operational definitions of indicators were revised, and each observer passed a test of his or her understanding of physical or social indicators, using a training instrument with vignettes adapted from Weisburd et al. (2004, 2006). A detailed route map with each block face numbered was also prepared and studied in advance by the “navigator,” who did not double this time as an observer. A city-owned van was used for this and subsequent observations, allowing all observers an adequate view of each block face. Whenever requested by an observer, the driver would stop the van to allow additional time to count indicator frequencies or back up to give observers a second look at specific physical or social features.

These changes in the methodology resulted in greater confidence that the indicators were being accurately observed, but a debriefing session led to two additional adjustments. First, operational definitions (Tables 2 and 3) adapted from Weisburd et al. (2004, 2006), were refined one final time to address any questions raised by the observers. To further address any reliability concerns, the team also decided that the two observers of each type of indicator (physical or social) would work together on subsequent observations. In practical terms, this meant that the two observers would discuss what they were seeing on each block face and reach consensus regarding the appropriate notation on the observation coding sheet.

Employing the refined procedures, neighborhood observations used in the analysis were conducted by a six-member team using a city-owned van. The team consisted of a driver, a “navigator” directing the driver through a systematic predetermined route, two observers of physical indicators, and two observers of social indicators. Observers noted on recording sheets (Figures 2 and 3) the presence/absence and frequency of the Table 1 indicators. Each observer had completed successfully the training tool related to physical (Figure 4) or social (Figure 5) indicators, and a tape recorder was present in the vehicle to capture any comments made by investigators and/or the driver for later documentation.

After the pilots, the procedure was conducted twice: November 16, 2007, and April 4, 2008. Observations were matched for day (Friday) and time (beginning at approximately 1:30 p.m. and lasting about two hours). Between these two dates, the police surveillance and undercover

operation, which began during the summer of 2007, were completed, and 30 arrests on drug-related charges were made in the neighborhood from February 22 to April 3, 2008.

Table 2. Operational Definitions of Physical Disorder, Order, and Decay Indicators

<p>Physical disorder</p> <p><i>Trash/garbage/litter on streets, on sidewalks, in gutters, and/or in common areas</i></p> <p>This variable measures the presence of litter on sidewalks or in streets or gutters or vacant lots within the neighborhood. Litter is constituted by objects discarded as typical trash items, including bottles and cans, not to include large items in yards such as broken down equipment or other items that could not be disposed of in regular trash collection cans. Trash/garbage/litter is present when it appears it would fill a five-gallon bucket or more. Common areas include, but are not limited to, parks, parking lots, passage ways, bus stops, benches on streets, and other areas common to all community members.</p> <p>Coding: Indicate whether trash/garbage/litter on streets, sidewalks, and/or in gutters are present. No frequency coding for this indicator.</p> <p><i>Residences with trash/garbage/litter in yard</i></p> <p>This variable measures the number of residential yards with trash/garbage/litter on them. Litter is constituted by objects discarded as typical trash items, including bottles and cans, not to include large items in yards such as broken down equipment or other items that could not be disposed of in regular trash collection cans. Trash/garbage/litter is present when it would take more than one person to pick it up and dispose of in a garbage can or more than one trip to collect and carry by hand. Yard is defined as private property inside a municipal curb or sidewalk.</p> <p>Coding: Indicate whether trash/garbage/litter in yard of residences is present. For frequency, indicate the number of residences where the indicator is present on each block face. Note if large materials are placed at the curb for pickup.</p> <p><i>Physical structures marked with graffiti</i></p> <p>This variable measures the number of buildings, retaining walls, bus stops, benches, playground equipment, or other common physical structures that are marked with graffiti in spray paint or graffiti markers, to include designs, words, or images.</p> <p>Coding: Indicate whether physical structures marked with graffiti are present. For frequency, indicate the number of structures marked with graffiti on each block face.</p> <p><i>Abandoned cars</i></p> <p>This variable measures the number of cars that appear abandoned as indicated by presence of two or more of the following physical characteristics: a shattered windshield or window, an exterior that has been burned or otherwise makes the car appear to be undriveable, missing or flat tire, and missing license plates. This variable is also indicated if a vehicle is surrounded or succumbed by overgrown grass or plants, parked in a wooded area or a similar zone that is not common for currently used automobiles (driveways, carport, garages).</p> <p>Coding: Indicate whether abandoned cars are present. For frequency, indicate the number of abandoned cars on each block face.</p> <p>Note: If a variable is observed in an intersection or in the middle of the street, please note it in the “Other” category.</p>
<p>Physical order</p> <p><i>Signs restricting access, documenting rules, or indicating neighborhood watch</i></p>

This variable measures any signs that denote warnings, or behaviors and actions that are restricted either by any governance or by community residents, property owners, or other. Indicators include “No Parking” and “Beware of Dog” signs.

Coding: Indicate whether signs restricting access, documenting rules, or indicating neighborhood watch are present. For frequency, indicate the number of signs present on each block face. Note any occurrence of “Community Watch” signs.

Physical structures with graffiti painted over

This variable measures the number of buildings, retaining walls, bus stops, benches, playground equipment, or other common physical structures with evidence of preexisting graffiti covered over in a “clean- up” attempt and remains painted or covered over.

Coding: Indicate whether physical structures with graffiti painted over are present. For frequency, indicate the number of structures with graffiti painted over for each block face.

Note: If a variable is observed in an intersection or in the middle of the street, please note it in the “Other” category.

Physical decay

Burned out or boarded or abandoned house

This variable measures the presence of buildings that are in a stage of legitimate decay and are likely no longer being used for legitimate residential purposes. Boarded houses include houses that have two or more visible boarded windows. Tally the total number of buildings you observe in these conditions.

Coding: Indicate whether burned out or boarded or abandoned houses are present. For frequency, indicate the number of burned out or boarded or abandoned houses on each block face.

Burned out or boarded or abandoned commercial building

This variable measures the presence of buildings that are in a stage of legitimate decay or appear to have been vacant for an extended period of time and are likely no longer being used for legitimate commercial purposes. Tally the total number of buildings you observe in this condition.

Coding: Indicate whether burned out or boarded or abandoned commercial buildings are present. For frequency, indicate the number of burned out or boarded or abandoned commercial buildings on each block face.

Buildings with broken windows

This variable measures the presence of buildings that have one or more broken windows and/or no more than one boarded window. Tally the total number of buildings you observe in this condition. (Note: For corner buildings, only record physical attributes that are visible from the sidewalk on the street segment being observed.)

Coding: Indicate if buildings with broken windows are present. For frequency, indicate the number of buildings with broken windows on each block face.

Note: If the condition of a house or commercial building is consistent with the definition of the indicators “burned out or boarded or abandoned house/commercial building” and “buildings with broken windows,” code for burned out or boarded or abandoned house or commercial building (whichever one is applicable). If the condition of a house is consistent with the definition of the indicator “building with broken windows,” code for “building with broken windows.”

Note: If a variable is observed in an intersection or in the middle of the street, please note it in the “Other” category.

Results

Observed frequencies for each of the social order/disorder indicators at Time 1 (11/16/07) and Time 2 (4/4/08) are shown in Table 4. The data do not satisfy assumptions for statistical tests of differences, but a close look at the results for different indicators (excluding the “Other” category, which included a variety of notations) reveals no striking change, and certainly no consistent pattern, from November to April. The same conclusions can be drawn for the observed values of the physical order/disorder/decay variables shown in Table 5.

Table 3. Operational Definitions of Social Disorder and Order, and Other Social Indicators

<p>Social disorder</p> <p><i>Individuals congregating or hanging out with verbal conflict</i></p> <p>This variable measures instances of two or more people in an exchange of verbal conflict with each other, as recognized by eye contact and proximity of the individuals in the exchange.</p> <p>Coding: Indicate whether individuals congregating or hanging out with verbal conflict are present. For frequency, indicate the number of groups congregating with conflict.</p> <p><i>Individuals congregating or hanging out with physical conflict</i></p> <p>This variable measures two or more individuals in a physical exchange that includes slapping, kicking, hitting, or other abusive physical contact.</p> <p>Coding: Indicate whether individuals congregating or hanging out with physical conflict are present. For frequency, indicate the number of groups congregating with conflict.</p> <p>Note: If individuals are observed congregating or hanging out and appear to be engaged in physical and verbal conflict, code for physical conflict only.</p> <p><i>Potential drug transaction activity</i></p> <p>This variable measures visible potential drug transactions. Drug transaction refers to the drug deal itself and involves the exchange of cash and drugs. Sometimes the drug sales are blatant, and money, vials, or clips can be observed changing hands. At other times, there will be a brief encounter with a contact person (usually from a car driving by). At other times, the transaction will take place on the street, as an open-air drug market; the buyer and seller walk together a ways and at some point money changes hands, at another, the drugs. Interactions characterized by activity that appears consistent with the above will be recorded as potential drug transaction activity.</p> <p>Coding: Indicate whether potential drug activity is present. For frequency, indicate the number of drug transactions on each block face.</p> <p><i>Potential prostitution activity</i></p> <p>This variable measures each instance where potential prostitution activity is observed. Style of dress is not necessarily a strong indicator of prostitution activity. A female prostitute’s appearance may range from the stereotypical image of wearing heavy makeup and revealing attire, such as a miniskirt with fishnet stockings, to jogging suits, snowmobile suits, and the “collegiate look.” Female prostitutes often work alone, while male prostitutes often work in groups. Characteristic of both groups is a slow aimless walk confined to a limited area.</p> <p>The male customer approaching a female prostitute generally does not know the woman, whereas customers of the male prostitutes have a preference for partners they have used before (although some of the verbal exchanges may indicate that “I haven’t seen you before” or “I haven’t used you before”). Male prostitutes will wave to cars from the</p>

corner; female prostitutes can be more aggressive, stepping into the road, sometimes directly into the path of the oncoming car as though they are flagging down help. There will be a short exchange at the car window, and the prostitute either gets into the car or returns to the sidewalk/corner. It may take some time before you recognize that the man or woman at the corner is soliciting sexual activity.

Interactions characterized by activity that appears consistent with the above will be recorded as potential prostitution activity.

Coding: Indicate whether potential prostitution activity is present. For frequency, indicate the number of potential prostitution transactions on each block face.

Loud noise/music

This variable measures the presence of observable loud noise/music.

Loud noise may include loud stereos, boom boxes, power tools, revving motors, band practice, and so on, or any noise that would interfere with your ability to hear a personal conversation in which you are engaged.

Coding: Indicate whether loud noise/music is present. No frequency measure for this indicator.

Note: If a variable is observed in an intersection or in the middle of the street, please note it in the "Other" category.

Social order

Individuals congregating or hanging out, no observable conflict

This variable measures the presence of two or more people gathered together within the neighborhood with no observable conflict. This variable will be indicated by the absence of verbal or physical conflict.

Coding: Indicate whether individuals congregating or hanging out with no observable conflict are present. For frequency, indicate the number of groups congregating without conflict.

Residents on porches

This variable measures the number of porches of a residence where people of any age are out front visiting without conflict or where an individual is on the porch, including simply entering or exiting the front door.

Coding: Indicate whether residents sitting on porches are present. If individuals are on porches, do not code for any other category. For frequency, indicate the number of porches that are occupied by individuals on each block face.

Individual juvenile or adult out in the neighborhood

This variable measures the presence of a single individual of any age out in the neighborhood, in front of home or street, appearing to be engaged in a routine activity such as walking to or from residence to car, or to or from a residence or business in the neighborhood.

Note when possible the age(s) of the individuals (adult vs. juvenile) and type of activity engaged in.

Coding: Indicate whether a single individual juvenile or adult out in the neighborhood is present. For frequency, indicate the number of individuals out in the neighborhood.

Note: If individuals are congregating or hanging out, no observable conflict and some of the individuals are on the porch and some not, code for "individuals congregating or hanging out, no observable conflict." Do not code for "residents on porches" in this case.

Note: If a variable is observed in an intersection or in the middle of the street, please note it in the "Other" category.

Other

Police patrol

This variable measures the presence of police patrol within the neighborhood. Police patrol applies when you witness either a police officer or group of officers reconnoitering the displacement site. Reconnoitering refers to

police engaged in foot patrol, riding a bicycle/scooter, driving by in a cruiser, or parked in their cruiser. Record all uniformed and plain-clothes police presence, as well as marked and unmarked motorized patrols. Motorized patrol refers to marked and unmarked police cars, as well as police motorcycles.

Coding: Indicate whether police patrol is present. For frequency, indicate the number of times police patrolling is observed on each block face.

Police interaction

This variable measures the presence of police interaction with the residents of the neighborhood. Police interaction applies when you observe either a police officer or group of officers interacting with a citizen or group of citizens. Interaction refers to the police talking with citizens, performing a search/investigation, or making an arrest. Police talking refers to an incident where a police officer(s) stops to talk with a citizen or citizens. Search/ investigation involves the police frisking a citizen or searching the physical surroundings (i.e., police searching the bushes in an empty lot for drugs).

Coding: Indicate whether police interaction is present. If a police interaction is coded, the police patrol column must also be filled out. This is because the police must first have had to enter into the area to interact with the citizen. A police patrol, however, does not necessarily mean a police interaction will take place, since it is possible for police to patrol an area without interacting with citizens. In other words, police interactions are always preceded by police patrols, but not all police patrols lead to police interactions. For frequency, indicate the number of times police interaction is observed on each block face.

Other activity of interest as observed

You might see rare instances of pick pocketing, murder, rape, and/or other varied criminal activities. Some possibilities include indecent exposure (i.e., “flashing”), urinating in public, and so on. You may also see instances of social/physical order/disorder that has not been mentioned previously. If an activity seems criminal or disorderly and does not fit any of the categories above, check this column and describe the activities on the comment page.

Coding: Indicate whether other behaviors of interest are present. For frequency, indicate the number of times each behavior is observed.

Note: If a variable is observed in an intersection or in the middle of the street, please note it in the “Other” category.

			#: _____ Date of Observation: _____ Day of week: _____ Time of Observation: _____ Time of Observation relative to initiative: _____
Neighborhood Constructs	Indicators	Frequency	Notes
Physical Disorder	Trash/garbage/litter on sidewalk/street/gutter/common areas		
	Residence with trash/garbage/litter in yard		
	Structures marked with graffiti		
	Abandoned cars		
Physical Order	Signs restricting access, documenting rules, or indicating neighborhood watch		
	Structures with graffiti painted over		
Physical Decay	Burned out or boarded or abandoned houses		
	Burned out, boarded or abandoned commercial buildings		
	Buildings with broken windows		
Other (please describe)			

Figure 2. Observation sheet for physical indicators

Results can be seen in Tables 6 and 7, which show observed counts of social and physical indicators by observation date and FDZ. These tables combine multiple indicators into the aggregate categories of Social Disorder, Social Order, Physical Disorder, and Physical Decay. Observations for the two physical order indicators—signs restricting access, documenting rules, or indicating neighborhood watch and structures with graffiti painted over—are separated in the table because the number of signs observed were so much greater than the number of any other indicator in any category. Results obtained in this part of the analysis continue to show (on the left side of each table) no noticeable differences between the total prearrest and postarrest observations within any category of social or physical indicators for FDZ 71 + 72 versus the other four FDZs (68–70, 73) combined.

Because the number of block faces varies from 6 to 37 across the different FDZs, the right side of each of these tables shows the number of observations per block face. While nothing remarkable emerges in prearrest to postarrest observations, this part of the analysis makes clear that, generally, the amount of orderly social interaction and the number of signs restricting access, documenting rules, or indicating neighborhood watch are much higher per block face in FDZ 71 + 72 than in the rest of the neighborhood combined. In FDZ 71 + 72, orderly social interaction was observed 1.76 times per block face in November and 1.67 times in April, compared with 0.55 times per block face in both November and April in the rest of the FDZs combined. In FDZ 71 + 72, the number of signs counted per block face was 4.24 in November and 3.38 in April, while the same observations in other parts of the neighborhood found 1.40 and 1.55 signs per block face, respectively.

			Block #: _____ Date of Observation: _____ Day of week: _____ Time of Observation: _____ Time of Observation relative to initiative: _____
Neighborhood Constructs	Indicators	Frequency	Notes
Social Disorder	Individuals congregating or hanging out with verbal conflict		
	Individuals congregating or hanging out with physical conflict		
	Potential drug activity		
	Potential prostitution activity		
	Loud music/noise		
Social Order	Individuals congregating or hanging out, no observable conflict		
	Residents sitting on porches		
	Individual juvenile or adult out in the neighborhood		
Other (please describe)	Police Patrol		
	Police Interaction		
	Other		

Figure 3. Observation sheet for social indicators

Discussion

Systematic observations were conducted in a neighborhood that was the focus of an initiative to eliminate a long-standing street-drug market. A comparison of observations from before and

after 30 arrests on drug-related charges found no important changes in levels of social order or disorder or of physical order, disorder, or decay, even in the specific parts of the neighborhood where the drug-market activity was most prevalent. However, the area where the police observed the market operations was found to have a higher level of orderly social interaction and a larger number of signs notifying passersby of alarm systems, warning about dogs, prohibiting trespassing or other specific activities, or laying out additional rules for the neighborhood. This difference was observed both before and after the arrests.

Directions:

For each scenario or situation presented, please indicate:

- a) The presence or absence of the possible indicators being coded. The absence of an indicator would be designated if not all criteria for a specific indicator are present.
- b) Identify the indicator(s) for presence and absence
- c) Frequency of present indicators

All scenarios occur on the block face being coded unless otherwise noted.

1. Several items, including bottles, cigarette butts, and food wrappers are seen in a community park. The items appear to be able to fill a two gallon bucket.
2. A neighborhood watch sign is located on the block face being coded and another neighborhood watch sign is observed on an adjacent block face.
3. A house is observed with three visible boarded windows. There is also a car parked in front of the house with a shattered window.
4. Images and words are seen through a coating of white paint on the side of a retaining wall.
5. A vehicle with a shattered windshield is parked on the street.
6. A residential yard is observed littered with typical trash items (bottles, cans, etc). It appears that the amount of trash is more than one person could pick up and dispose of in one trip.
7. A house appears to be in a state of decay, so much so that it is not likely that it is being used for legitimate residential purposes.
8. A commercial building is observed that appears to be in a legitimate state of decay and is no longer being used for legitimate commercial purposes.
9. A car with a missing tire and a shattered window is parked in a yard.
10. A building is observed with two broken windows.
11. A house is observed with one visible broken window and another house, on the same block face, is observed with two visible boarded windows.
12. A building with two broken windows is observed. In addition, designs and images are seen spray painted on the side of the same building. There are also three small, empty soda bottles on the sidewalk in front of the building.
13. Two small bottles are seen in a residential yard. No other trash is visible.
14. A sign denoting "no loitering" is observed near a commercial building.
15. A commercial building appears to be in a state of decay, but is obviously still being utilized for legitimate commercial purposes.
16. Approximately 5 cigarette butts are seen at a bus stop. No other trash is visible.
17. Designs, words, and images are spray painted on the side of two buildings located on the same block face.
18. A house is observed that has three broken windows and two boarded windows.

Figure 4. Observation training tool for physical indicators

The research team's expectations were that any physical changes would be slower to emerge than social changes, if the drug-market elimination initiative was successful. Even in the short term, however, neighborhood residents might feel safer after the drug-related arrests, leading to more people being out in the neighborhood or on their porches, involved in observable, friendly social interaction or individual activities. Given that such changes were not observed, what types of lessons can be learned from this application of systematic neighborhood observation to the evaluation of a strategic initiative to eliminate a street-drug market?

Directions:

For each scenario or situation presented, please indicate:

- a) The presence or absence of the possible indicators being coded. The absence of an indicator would be designated if not all criteria for a specific indicator are present.
- b) Identify the indicator(s) for presence and absence
- c) Frequency of present indicators

All scenarios occur on the block face being coded unless otherwise noted.

1. Two males standing in a front yard looking at each other. Even though you can't hear the details of their confrontation it seems that they are shouting at each other. Their body language suggests tension between the two. They go from standing about 4 feet away and talking, to talking and pointing at each other within inches of each other.
2. A man is walking down the sidewalk when a car approaches him. A woman gets out and confronts him. She slaps him and knees him in the groin. He retaliates by pushing her to the ground.
3. A group of men standing on a corner, just hanging out and talking. A car with a driver and passenger drives up to the corner and the passenger talks to the men on the corner. One of the men from the corner approaches the car, looks over his shoulder several times, then quickly shakes hands with the passenger, possibly exchanging items.
4. A group of three young men are hanging out on a sidewalk, approximately ranging from ages 15 to 25. One guy walks slowly up and down the sidewalk as if to be killing time. An older gentleman approaches the young man in a car. After a minute of talking, the boy gets in the car with the older man and rides away with him.
5. A car slowly drives down the street blasting gangster rap music with a volume level loud enough to rattle surrounding windows.
6. A man and woman have a verbal dispute in their front yard. Their shouting becomes increasingly intense and a neighbor comes into the yard and joins in the dispute. After a few minutes of shouting and profanities the man leaves.
7. While observing you see a group of two men kicking another man on the ground. After they finish kicking the man on the ground, he rises and staggers down the sidewalk when another group of two men push him back to the ground.
8. A woman approaches a man on the corner and begins talking to him for a moment. She offers him some cash, the man refuses and walks away.
9. A woman wearing a short skirt approaches a man in a car and talks to him for a few minutes before getting in the car with him, at the same time on the same block face another similarly dressed woman accepts cash from a man she's been talking to for a few minutes, they then continue to walk together into an alley.
10. There's a party down the street and the music from it is so loud it can be heard from several blocks away. Also, someone on a motorcycle passes by you and the roar of the engine is so loud it almost hurts your ears.
11. A group of five guys are hanging out by a car in the driveway of a house. They're standing around talking and drinking a few beers. Apparently they're telling jokes because occasionally they'll break into laughter.
12. As you ride by a house an elderly married couple sitting in rocking chairs on their front porch waves at you.
13. A girl looking to be about 13 years of age casually rides a bicycle down the street. She makes the appropriate hand signals, follows the street signs, and even is wearing a helmet and knee pads.
14. On a street corner you see two guys standing together talking. On the same block face you see two women walking together and laughing.
15. While riding down a street you notice 8 houses; oddly there is no activity in the yards, drive ways, or porches. Everything seems relatively quiet.

16. You observe a two on two basketball game in a church courtyard.
17. A uniformed policeman walks down a certain street. He doesn't make any interactions but rather seems to be walking as part of a routine. About fifteen minutes later a woman rides down the same street in what you believe to be an unmarked police car. She appears to be a police detective, she's wearing a suit and uses a radio to communicate, also there appears to be a strobe light mounted about her rear-view mirror. She too makes no interactions with citizens, but rather continues to ride down the street.
18. You observe a policeman riding down the street in his police cruiser. He abruptly pulls up on the curb and jumps out, grabbing an individual and talks to them for a few minutes. Finally he releases the person and returns to his vehicle, leaving the scene.
19. While on one street you are passed by three police cars riding at normal speeds in single file. There seems to be no apparent rush.
20. A policeman is talking to individuals and taking notes. Simultaneously a police car has pulled a car to the side of the street. The policeman conducting the interview finishes his conversation, thanks the people, and walks down the sidewalk to assist the officer in the cruiser.

Figure 5. Observation training tool for social indicators

Table 4. Observed Values of Social Disorder/Order Indicators

Observed social variable	Time 1 (11/16/07)	Time 2 (4/4/08)
Potential drug activity	1	0
Potential prostitution activity	1	1
Loud noise	2	1
Congregating, no conflict	35	38
Sitting on porches	16	12
Individuals out in neighborhood	32	34
Police patrol	1	1
Police interaction	0	3
Other	11	0
Total social disorder	4	2
Total social order	83	84

First, time of day and day of week for such observations must be carefully considered, and conducting observations on a variety of days and at a variety of times could be useful. There would be difficulties involved in trying to observe these types of indicators after dark, when some indications of social disorder might be more likely. Conversely, it may be that Friday afternoons, when observations were conducted for this evaluation, are typically times of outdoor social activity of an orderly nature. This may be particularly true in the type of neighborhood in which this drug market existed. Police observed market activities within a public housing area and between that area and a nearby apartment complex. Thus, the neighborhood is densely populated, and there are recreational opportunities, both of which are likely to encourage residents to participate in orderly outdoor activities on sunny Friday afternoons when the weather is pleasant, as it was on both days that these observations took place. This means that the type of neighborhood and the weather may be important considerations, also, at least in interpreting results.

Table 5. Observed Values of Physical Disorder/Order/Decay Indicators

Observed physical variable	Time 1 (11/16/07)	Time 2 (4/4/08)
Trash in common area	23	21
Residence with trash	5	13
Structures with graffiti	16	12
Abandoned cars	11	19
Signs restricting access, documenting rules, indicating neighborhood watch	210	200
Graffiti painted over	2	4
Burned out, boarded, abandoned houses	17	16
Burned out, boarded, abandoned commercial buildings	4	5
Buildings with broken windows	1	4
Other	0	1
Total physical disorder	55	65
Total physical order	212	204
Total physical decay	22	25

It is possible that the indicators of social order/disorder used in this study were not numerous enough or not specific enough to distinguish different types of activity on the two observation dates. To some extent, this issue is inherent in this type of observational study. While a situation of conflict may be relatively easy to recognize as an indicator of social disorder, content of conversations is not accessible to passing observers. It may be, for example, that some “orderly” interactions are in fact related to illicit drug transactions. In more general terms, do the indicators indicate order or disorder? Consider, for example, the large number of signs in this street-drug market area notifying passersby that residences are protected by alarm systems, restricting access in other ways, or documenting rules of behavior. While such signs clearly indicate attempts to maintain order, are they so numerous because disorder is rampant or a constant threat? Evaluators should address these types of measurement issues in designing neighborhood observations, taking into account other data that may be useful in interpreting the results.

The amount of time between the arrests and the second observation in this study may not have been sufficient to allow for changes in social activity that might be expected when criminal activity in a neighborhood is suddenly reduced. Although the bulk of arrests occurred at least a week before the observation, 2 of the 30 arrests took place just one day prior to the observational fieldwork. A follow-up observation at a later date in such situations would be advisable. This seems especially important, given that physical changes in the neighborhood may become evident over longer periods of time, if the elimination of the street-drug market is sustained.

Increased numbers of indicators and observations conducted at more times both raise issues of research staff size, as well as the amount of time and other resources that will be devoted to such neighborhood observations. This, of course, applies to data entry and analysis as well. As in any project, a research team considering the use of this methodology will need to balance the value

of observational data with the costs of collecting the data in this way, in comparison and/or combination with those of alternative data collection strategies. Data from neighborhood observations certainly can be supplemented and made more meaningful through the use of interviews, focus groups, and police department records such as calls for service, arrests, and criminal charges.

Table 6. Physical Observation Results by FDZ and Date

Date	Physical Order							Per Block Face			
	FDZ	Physical disorder	Signs ^a	GPO	Physical decay	Other	Number of block faces	Disorder	Signs ^a	GPO	Decay + other
11/16/2007	68	5	11	0	6	0	6	0.83	1.83	0.00	1
4/4/2008	68	7	16	1	6	0	6	1.17	2.67	0.17	1
11/16/2007	69	15	36	0	4	0	24	0.63	1.5	0	0.17
4/4/2008	69	19	41	0	4	1	24	0.79	1.71	0	0.21
11/16/2007	70	22	52	1	8	0	37	0.59	1.41	0.03	0.22
4/4/2008	70	28	49	1	8	0	37	0.76	1.32	0.03	0.22
11/16/2007	71	8	49	1	4	0	10	0.8	4.9	0.1	0.4
4/4/2008	71	4	38	1	7	0	10	0.4	3.8	0.1	0.7
11/16/2007	72	4	40	0	0	0	11	0.36	3.64	0	0
4/4/2008	72	6	33	1	0	0	11	0.55	3	0.09	0
11/16/2007	73	1	17	0	0	0	16	0.06	1.06	0	0
4/4/2008	73	1	23	0	0	0	16	0.06	1.44	0	0
11/16/2007	Total	55	205	2	22	0	104	0.53	1.97	0.02	0.21
4/4/2008	Total	65	200	4	25	1	104	0.63	1.92	0.04	0.25
11/16/2007	71 + 72	12	89	1	4	0	21	0.57	4.24	0.05	0.19
4/4/2008	71 + 72	10	71	2	7	0	21	0.48	3.38	0.1	0.33
11/16/2007	All others	43	116	1	18	0	83	0.52	1.4	0.01	0.22
4/4/2008	All others	55	129	2	18	1	83	0.66	1.55	0.02	0.23

Note: FDZ = Fire Demand Zone; GPO = graffiti painted over. ^aSigns restricting access or activities.

Table 7. Social Observation Results by FDZ and Date

Date	FDZ				Per Block Face			
		Social disorder	Social order	Other	Number of block faces	Disorder	Order	Other
11/16/2007	68	0	12	4	6	0	2	0.67
4/4/2008	68	0	6	2	6	0	1	0.33
11/16/2007	69	1	19	1	24	0.04	0.79	0.04
4/4/2008	69	1	24	0	24	0.04	1	0.00
11/16/2007	70	1	15	2	37	0.03	0.41	0.05
4/4/2008	70	1	16	0	37	0.03	0.43	0.00

11/16/2007	71	1	14	0	10	0.1	1.4	0.00
4/4/2008	71	0	15	1	10	0	1.5	0.10
11/16/2007	72	1	23	0	11	0.09	2.09	0.00
4/4/2008	72	0	20	1	11	0	1.82	0.09
11/16/2007	73	0	0	5	16	0	0	0.31
4/4/2008	73	0	0	0	16	0	0	0.00
11/16/2007	Total	4	83	12	104	0.04	0.8	0.12
4/4/2008	Total	2	81	4	104	0.02	0.78	0.04
11/16/2007	71 + 72	2	37	0	21	0.1	1.76	0.00
4/4/2008	71 + 72	0	35	2	21	0	1.67	0.10
11/16/2007	All others	2	46	12	83	0.02	0.55	0.14
4/4/2008	All others	2	46	2	83	0.02	0.55	0.02

Note: FDZ = Fire Demand Zone.

Systematic neighborhood observation, like any other data collection strategy, can reveal unexpected patterns that may not be recognized when only other methods are employed. In this study, for example, the extent of social interaction in specific parts of the neighborhood became evident, and such information can provide value in interpreting other data. Similarly, systematic observation can give researchers a “feel” for what life in a neighborhood really looks like, providing context that is not accessible through any other commonly used methodology.

Thus, the potential value of systematic neighborhood observation to any evaluation project similar to this one should be carefully considered. Full consideration will involve details of the methodology, the resources it requires, and its potential for both expected and unexpected findings, as well as the neighborhood context and the objectives of the evaluation.

Authors' Note

An earlier version of this article was presented at a roundtable session of the Annual Meeting of the American Society of Criminology (November 2008), St. Louis, Missouri. The opinions, findings, and conclusions or recommendations expressed in this document are those of the authors and do not necessarily reflect the views of the Department of Justice.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the National Institute of Justice (Award 2006-IJ-CX-0034).

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