

# **Participation and the Social and Physical Environment of Residential Blocks: Crime and Community Context<sup>1</sup>**

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*We propose a framework for understanding the relationship of participation in block associations to a wide range of block-level variables (demographics, the built environment, crime, and the transient social and physical environment). Data were obtained from 48 New York City blocks using (a) a telephone survey of residents (n = 1,081), (b) the Block Environmental Inventory (BEI), (c) police records of reported crime, and (d) a survey of block association members (n = 469). The BEI, which measures the built*

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*environment, physical disorder, and territoriality was reliable and correlated significantly with the social climate, crime, demographics, and participation. The transient portion of the framework received particular support as four variables independently explained a total of almost 40% of the variance in participation. The results suggest that a combination of catalysts in the physical environment (e.g., poorly maintained properties) and enablers in the social environment (e.g., block satisfaction and neighboring) may increase participation. The relationship between participation and crime and reactions to crime remains unclear.*

Citizen participation in grass-roots organizations and other mediating structures has gained the interest of community psychologists for several reasons. The populist mandates for local democracy, citizen involvement in government services, and civic voluntarism have long enjoyed both popular and political support (Bellah, Madsen, Sullivan, Swindler, & Tipton, 1985). Furthermore, the related concepts of participation and empowerment are seen as having great heuristic potential as guiding principles for theory, research, and practice across the many settings and levels of analysis encompassed by community psychology (Heller, Price, Reinharz, Riger, & Wandersman, 1984; Rappaport, 1981).

Unfortunately, much of the research on participation and empowerment has not used the contextual or "ecological" approaches widely advocated by community psychologists (Heller et al., 1984; Levine & Perkins, 1987; Trickett, Kelly, & Vincent, 1985). The fact that participation is distributed within urban areas in fairly uneven cultural and geographic patterns (Heller et al., 1984; Podolefsky, 1983) suggests that many of its determining factors may reside at the community level. Understanding participation thus demands careful consideration of the social and environmental context of local communities.

No issue is more often a focus of concern in urban communities than crime (Clark, Chavis, & Glunt, 1988; Flanagan & Jamieson, 1988; Miller, Tsemberis, Malia, & Grega, 1980). Thus, the present study explores the crime-related physical and social environment of urban neighborhoods as a context for collective participation and empowerment, namely, the formation and functioning of voluntary block associations. Instead of asking only the question, "What is it about certain individuals that makes them try to change their environment?," in this paper we ask, "What characteristics of community environments are related to people's participation in collective action?" Although reciprocal causality between participation and community context is assumed, we focus here on *contextual factors as predictors of participation*.

## A MODEL OF CONTEXTUAL DETERMINANTS OF PARTICIPATION

The model we propose for the contextual determinants of citizen participation in block organizations (depicted in Figure 1) consists of five sets of predictor variables. First, the *demographic* characteristics and *built environment* of the block describe the more permanent attributes of the setting and provide the most distal crime-related predictors of participation. For example, blacks have been found to participate more than whites at the same income level (Williams, Babchuk, & Johnson, 1973). In general, having greater resources (home ownership, education, socioeconomic status) may make it easier to participate (Hyman & Wright, 1971). If this is true at the community level, it suggests that those poor areas most in need of organization are most difficult to organize. The built environment consists of architectural and urban planning features such as building size, street width, real and symbolic barriers, and outdoor seating. These may be indirectly related to participation through their impact on resident interaction.

The next stage in the model is the level of *crime* on the block. Crime may be influenced by the first two sets of variables and is also thought to be a major reason why many people participate in block associations (most of which are involved in one or more crime control activities). We have placed crime in a more distal and permanent position than the transient social and physical environment, however, because crime has proved such an intransigent problem in many communities and because its impact on behavior is mediated through residents' often inaccurate perceptions of risk (Taylor & Hale, 1986).

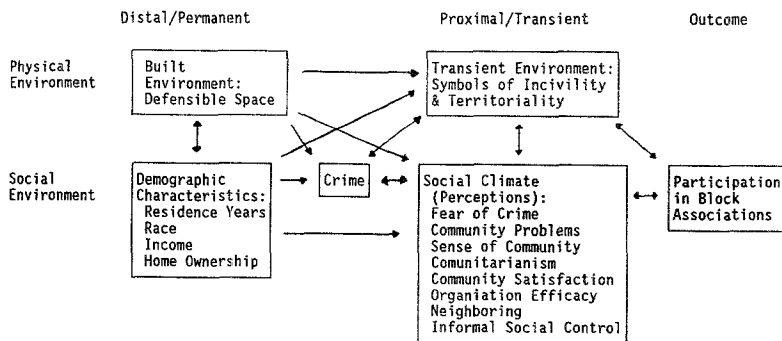


Fig. 1. Contextual determinants of participation in block associations.

The more *transient physical environment* and *social climate* of the block make up the last and most “proximal” predictors of collective participation. Residents frequently join community associations in order to reduce social and physical manifestations of disorder and create a more livable setting. If successful, efforts to improve the local environment may elicit even greater confidence and participation among residents.

Finally, the bidirectional arrows in the model reflect our understanding that the sets of variables can influence each other in multiple and reciprocal ways. For example, participation may also influence the transient physical and social environment (which influence each other), and, either directly or indirectly, crime. The present analysis does not attempt to test the entire model in its systemic complexity. It focuses on the relative contribution of each variable to predicting collective participation on the block. The remainder of this introduction presents some literature and rationale underpinning each set of variables, followed by a discussion of the ecological validity of the block level of conceptualization and the impact of block associations. The introduction concludes with a review of some of the major problems in measuring each type of contextual variable.

## THE PHYSICAL, SOCIAL, AND CRIME-RELATED CONTEXT OF PARTICIPATION

Except for community responses to environmental hazards (Cook, 1983; Edelstein & Wandersman, 1987; Erikson, 1976; Gibbs, 1983), there is little literature on the physical context of citizen participation. Therefore, we have borrowed several principles from studies of environmental criminology and human territoriality for their possible relevance to participation.

### *The Built Environment*

There are permanent characteristics of the physical environment that are directly related to residents' feelings of vulnerability and a criminal's ability to strike. These may be divided into two types: “macro” design (arrangement of buildings and street layout) and “micro” design (smaller features which may be added to the macro design). On the macro side, Jacobs (1961) first proposed the idea that certain urban design principles might reduce crime in residential areas. Newman (1972), who coined the phrase “defensible space,” suggested that certain architectural features, such as public space dividers, greater visibility, and small and low-rise designs in multiunit buildings, would encourage residents to exercise territorial control (cf. Merry, 1981). Ecological “manning” (Barker & Gump, 1964) and community-

organizing theories (Kahn, 1982) might also suggest that fewer residents in smaller buildings should increase the average level of participation in the group.

Micro defensible space consists of surveillance aids and barriers to entry. Real barriers include physical objects, such as walls, fences, or security bars, that can impede a criminal's entry or exit. Symbolic barriers, on the other hand, such as low walls or railings, simply imply where public space ends and private space begins. Informal surveillance opportunities are enhanced by such environmental features as outside lighting, sight lines, and places to sit outdoors. Many of the principles of defensible space are explicitly designed to encourage greater social contact among neighbors and a proprietary interest in the community (Perkins, Rich, Chavis, Wandersman, & Florin, 1986). It is in this way that architecture can encourage participation. However, the community of interest in much (particularly macro) defensible space research has been public housing projects. The present study is one of the first to examine both micro and macro principles in nonsubsidized residential areas.

### *The Transient Physical Environment*

*Incivilities* are symbols of social disorder. Physical incivilities can be either passive (such as litter and unkempt housing) or deliberate (such as graffiti and vandalism). Social incivilities include visible signs of disorder, such as prostitutes, drug dealers, or youth gangs loitering on the street. Incivilities have been empirically linked to residents' fear of crime (Ahlbrandt & Cunningham, 1979; Perkins, Meeks, & Taylor, 1989; Reppetto, 1974; Skogan & Maxfield, 1981; Taylor, Gottfredson, & Brower, 1984) and theoretically linked to actual street crime (Wilson & Kelling, 1982). Further research is required to understand the relationship of incivilities to participation.

A key component in theories of *territoriality* involves physical markers that convey nonverbal cues, or messages, of ownership, investment protection, and a separation between one's self or family and outsiders for the primary purpose of controlling behavior in a particular place (Altman, 1975; Appleyard, 1981; Brown & Altman, 1983; Taylor, 1988; Taylor & Stough, 1978). Such markers may be manifest in a variety of ways, such as maintaining or beautifying the block (e.g., gardens, yard decorations) or personalizing the physical environment of one's home (e.g., placing the family name on the front door). Territorial markers tell the intruder that the space is closely monitored.

There is considerable variation in territoriality across and within neighborhoods (Taylor, 1988). Territorial markers have been associated with resi-

dents' perceptions of fewer social and physical incivilities and crime-related problems (Brower, Dockett, & Taylor, 1983; Craik & Appleyard, 1980; Perkins et al., 1989) and even with fewer property violations, especially burglaries (Becker, 1977; Brown & Altman, 1983). Territoriality has also been empirically linked with greater social interaction, sense of community (Becker, 1977), and general social cohesiveness (Brown & Werner, 1985). Theoretically, participation in block associations should be related to greater signs of territoriality (Unger & Wandersman, 1985) but until now this hypothesis has not been tested.

We can summarize the hypothesized physical environmental relationships with collective participation as follows: Defensible space may increase natural surveillance opportunities and encourage social contacts which in turn may boost participation. The transient physical environment is hypothesized to operate differently. Residents may participate in local voluntary associations in part to reduce incivilities and increase manifestations of territoriality in the community. Improving the physical environment is a concrete symbol of residents' control and so it may empower residents with the confidence to address other, more complex, problems.

### *The Social Climate*

This study focuses on several dimensions of the community social environment, or climate, which may be related to participation in voluntary associations in different ways. For example, social contact, particularly in public areas, and informal mutual assistance, or *neighboring* behavior (Unger & Wandersman, 1982, 1983, 1985; Warren, 1986) allow residents to become better acquainted and discuss shared problems and may provide an impetus toward collective action.

The other key behavioral dimension of the social environment is *informal social control*, which is the ability of residents of an area to regulate everyday public behaviors and physical conditions within the bounds of their community (e.g., a resident stopping a youth from vandalizing property). Low informal social control has been linked to residential and commercial flight, crime and deterioration of the physical environment (Greenberg & Rohe, 1986; Hunter, 1974; Rich, 1980; Shotland & Goodstein, 1984; Skogan & Maxfield, 1981; Wilson & Kelling, 1982). Podolefsky (1983) found that informal social control appeared strongest and most important in neighborhoods without much organized crime prevention activity, as if the latter serves to compensate for a lack of the former. We do not know, however, if this is also true of broader-based community organizations.

The remaining dimensions of community social climate are nonbehavioral. For example, it may be argued that a group of residents must have

at least some psychological sense of community to be interested in organizing an association and working together (Ahlbrandt & Cunningham, 1979; McMillan & Chavis, 1986). The findings of Chavis and Wandersman (1990) suggest that a sense of community may lead to individual-level participation. But it is not clear whether the process operates, or operates in the same way, at the community level.

Florin and Wandersman (1984) developed a cognitive social learning (Mischel, 1973) framework for explaining citizen participation at the individual level of analysis. In order not to confuse the individual-level, person-situation variables with the corresponding, community-level social climate variables, the italicized terms are used to refer to the latter. "Subjective stimulus values" (*communitarianism*) encompass the importance residents place on the community and on working to improve it. If residents participate more in communities they value, a communitarian climate should encourage greater collective participation. Florin and Wandersman (1984) found that subjective stimulus values predicted individual participation far better than any other variable they considered. Their variable "expectancies" involves the way people interpret the consequences of their own action as well as the *perceived efficacy of collective action*, which should be related to greater collective participation. Their version of the variable "encoding strategies" was made up of *perception of community crime and other quality-of-life problems* and *satisfaction with one's community* as a place to live. Florin and Wandersman (1984) found individual participation modestly associated with less positive encoding of community conditions.

Community satisfaction and perception of problems may be related to participation in different ways, however. Perceived problems (negative encoding) may elicit participation toward solving those problems. But community satisfaction (positive encoding) may also encourage participation by enhancing residents' sense of community, communitarianism, collective efficacy, and neighboring behavior. Community satisfaction and perception of problems were, therefore, kept separate in the present study which is discussed below.

### *Participation as a Response to Crime*

The last social climate variable in the model is fear of crime. Durkheim (1893/1947) suggested that crime can unite a community against the violation of norms. Until recently, however, "private-minded" reactions to crime (e.g., fear, helplessness, avoidance behavior, self-protection) had been examined far more thoroughly than collective, "public-minded" and empowering, responses (Schneider & Schneider, 1977). Yet attempts to generalize about the community impact of crime solely on the basis of individual reactions

to fear and victimization can be misleading. The impact of crime on participation may depend on the type of organization available and whether the perceived threat can be channeled into healthy community (cf. Skogan, 1986) and psychological (cf. Taylor & Perkins, 1988) processes. For example, Skogan and Maxfield (1981) found fear and exaggeration of the crime problem related to neighbors talking about crime and participating in victimization prevention groups (cf. Rosenbaum, 1988), which tend to emphasize information about crime. Thus, one reason for studying participation in multi-issue community development organizations, which engage in emotional and instrumental as well as informational support, is to see whether it is unrelated, or perhaps even negatively related, to fear.

### **BLOCKS AND BLOCK ASSOCIATIONS**

Broad-based community development organizations address many of the root causes of street crime, such as problems in the social, physical, and economic environment of the neighborhood, and thus may represent the most promising approach to urban crime prevention (Curtis, 1987; Perkins, 1985; Rosenbaum, 1988). Although the reaction to crime literature has begun to focus more on the community level and on community development organizations, it has generally ignored the block level of analysis. One of the most common vehicles for community development, however, is the block-level, general-issue, voluntary organization, typically called a "block association." There are several reasons why the block (operationally defined as the dwellings fronting on a single street between two cross streets) is an important focus for both research and community organizing. First, its boundaries are less ambiguous to local inhabitants and more easily defined for research purposes than are neighborhood boundaries (Taylor, 1988). Second, blocks are more culturally homogeneous than larger units, such as neighborhoods and police precincts, and residents are more likely to know and share the same concerns with people from their own block (Gans, 1967). Third, participation rates at the block level have been found to be significantly higher than at any other level of community or political organization (McKenzie, 1923/1970, as cited in Taylor, 1988; Yates, 1973). Fourth, the processes of informal social control and territoriality (Taylor et al., 1984) and formally organized community crime prevention (Taylor & Gottfredson, 1986) should operate more successfully in the face-to-face setting of the block than in larger social units. All four reasons suggest that blocks may hold greater meaning than cities or even neighborhoods as an "ecologically valid" unit of analysis. Ecological validity, or the degree to which the research definition of a social area accurately reflects natural boundaries, is critically important when study-



ing community-based attitudes (e.g., sense of community, communitarianism) and behaviors (e.g., neighboring, civic participation).

The characteristics of blocks also help to explain why block-level organizations seem to have a greater influence on the quality of everyday residential life than do more centralized political or service organizations (Yates, 1973). Block associations are self-help groups for ordinary residents. They are task-oriented and tend to take on uncomplicated activities for which skills and resources are readily available (e.g., street cleanups, crime watch, block parties, youth activities, etc.). Unlike most victimization prevention programs, general purpose block associations have been found to increase both the neighboring behavior of residents (Unger & Wandersman, 1982, 1983) and their psychological sense of community (Chavis, Hogge, McMillan, & Wandersman, 1986; Wandersman, Jakubs, & Giamartino, 1981). Block associations can simultaneously promote the instrumental support of *gesselschaft* and the emotional support of *gemeinschaft*. The small scale of block associations and the immediacy of the problems they address often make changes at the block level more noticeable to residents, which can result in greater participation and empowerment. Despite this potential, the ecological context of participation in block associations has not been systematically examined.

## PROBLEMS IN MEASURING CONTEXT

### *The Physical Environment*

Although many social researchers have focused on the physical environment of residential neighborhoods, few have measured it directly. Most have instead relied solely on the subjective method of asking residents about their perceptions of the local setting. Objective (independent and systematic) measures of the environment are important for several reasons. First, the validity and reliability of resident perceptions is unclear. Second, even if psychometric issues are resolved in one study, other groups in other settings may respond differently. Third, objective measurements avoid the problem of method bias when used with survey-based measures of other variables. Finally, objective measures are important because of the role they can play in informing efforts to improve the quality of life through modifications of environmental design.

Unfortunately, there have been only a few different methods developed for the objective assessment of community physical environments. Craik and Appleyard (1980) used two separate methods: "environmental profession-

als" judging photographic slides of street scenes and an assessment inventory completed by trained raters on foot. Brown and Altman (1983) also used trained raters, but added considerable detail in assessing five different classes of territorial displays (Brown & Altman, 1981). Taylor and his colleagues developed environmental measures based on ratings of color slides of properties (Taylor et al., 1984) and a "windshield survey" protocol in which raters observed residential blocks from their automobiles (Taylor, Shumaker, & Gottfredson, 1985). The procedure used in the present study is similar to a method recently developed by Perkins et al. (1989) which focuses on both block and property-level assessments of defensible space, territoriality, and incivilities. It is conducted on foot and has been found to exhibit strong interrater reliability and predictive validity.

### *Problems in Measuring Social Climates*

The practice of aggregating individual perceptions to the group level for the purpose of deriving contextual or social climate variables has been a controversial issue. Joyce and Slocum (as cited in Shinn, in press) identified three criteria for validating aggregate individual perceptions as social climate variables. First, climate variables should exhibit sufficient interrater agreement among members within each group. Second, climates should show reliable differentiation, or variance, across groups. Third, there should be predictable relationships between climate and other variables at the group or individual level. The validity of the social climate portion of the present analyses, therefore, hinges on the degree to which residents agree, blocks vary, and climate variables predict other variables. If social climate variables are strongly related to other parts of the model, especially to other sources of data, it would lend particular support to them as valid measures at the block level of conceptualization.

### *Problems in Measuring Crime*

Although the crime analysis and reporting capabilities of police departments have improved considerably over the years, official police data still tend to underestimate actual crime and are often of questionable reliability and validity (O'Brien, 1985). An increase in rates may even result from more effective crime control as reporting goes up. Furthermore, unlike the present study, crime rates are usually only available on annual FBI Part 1 ("index") crimes in an entire city or precinct which can obscure patterns of other crimes, over shorter periods, and at other levels of analysis. Although surveyed victimization rates are generally considered more accurate than official crime

rates, they too suffer from measurement problems (Levine, 1976; O'Brien, 1985). Thus, triangulation of data sources provides an important, albeit imperfect, degree of cross-validation of area crime rate (O'Brien, 1985).

## THE PRESENT STUDY

This study operated from a theoretical framework which places block-level collective behavior within the ecological context of block-level social and environmental conditions. By comparing these contextual factors for their relationship to collective participation in block associations, we seek to identify which factors are associated with community organizations that can remain viable even in high-crime, lower-income neighborhoods. We introduce and test the reliability and predictive validity of a new method of objectively measuring the built and transient physical environment of residential blocks.

### *Hypotheses*

Block-level participation is expected to be predicted by (a) greater demographic resources, (b) built environmental features that facilitate social interaction and a sense of ownership (i.e., defensible space), (c) such motivating conditions as greater official crime and victimization rates, (d) physical incivilities and territoriality, and (e) greater cohesion in the social environment (i.e., block satisfaction, sense of community, communitarianism, perceived block association efficacy, informal social control, neighboring behavior, and lower fear of crime), and greater perceptions of block crime and quality-of-life problems. Note that fear of crime is predicted to have the opposite effect (negative) on participation as actual crime and the perception of crime (positive). Finally, the built environment, crime, the social climate, and the transient physical environment are each predicted to contribute significant independent (unique) variance to rates of participation, over and above the influence of demographic variables.

## METHODS

### Site Selection

We selected New York City for its large number and long history of block-level resident associations and for the availability of a citywide tech-

nical assistance organization to facilitate the project. We selected 21 potential sample neighborhoods on the basis of (a) having increasing robbery and burglary rates (while citywide rates were decreasing), according to the latest available police reports (1984), and (b) having a sufficient number of active block associations, according to the civic organization's mailing list. We sent 1,521 letters with return cards to leaders of block associations in these neighborhoods inquiring about their interest in the action component of the project and in their willingness to participate in the research component. Based on the cards that were returned (10%), three neighborhoods were selected. One is a predominantly white, lower-middle-class neighborhood. One is a working-class neighborhood with a mixture of whites and Caribbean and American-born blacks. One is a predominantly black area ranging from low income to working class. We avoided neighborhoods in Manhattan since its dense settlement patterns make it atypical of other U.S. cities.

A total of 48 blocks were selected from these three neighborhoods. Criteria for selection included that blocks be predominantly residential in land use (i.e., nonresidential properties allowed on the corners only) and of moderate size (25 to 100 households), according to the most recent "criss-cross" telephone directory (listed by street address). Site visits were made to each potential study block to verify that they met these criteria and one other: Both the physical layout and land use pattern on the blocks and their adjacent blocks had to be typical of the neighborhood as a whole.<sup>3</sup> Dwellings were typically small, single-family houses, duplexes, or very small (4-to-10-unit) apartment buildings.

Block associations had to be at least 1-year-old, at least minimally active (i.e., holding regular meetings) and had to agree to participate through the 2 years of data collection and intervention of the larger project. Within each neighborhood, potential organized and unorganized blocks were selected from the same or demographically similar census tracts, but were not so close as to risk spillover effects, which have hampered other community crime prevention studies (Bennett & Lavrakas, 1988). A minimum of five residents of each potential nonorganized block were contacted to verify the absence of a block association before the block was included.

Despite these precautions, responses on the resident and block association member surveys and informal follow-up interviews of some residents suggested that a few of the block organizations were beginning to decline and two unorganized blocks were actually in the incipient stages of organizing. Although this situation may be undesirable from a quasi-experimental

<sup>3</sup>For example, if the neighborhood street pattern was a grid with the commercial concentration at the boundary, selected blocks fit that pattern and were not adjacent to the central business district.

design perspective, it is an inevitable part of field research with dynamic social units. Rather than exclude these changing blocks we have tried to capture the real-life vicissitudes of small-scale voluntary associations by developing a multimethod and continuous, as opposed to dichotomous, measure of block-level organizational participation for the present analysis (see below).

### **Instruments**

The data reported here were obtained from four sources: (a) a telephone survey of randomly selected residents of each block; (b) an observer-conducted assessment of the physical environment of each block; (c) police records on reported crime, analyzed at the block level; and (d) a survey of block association members.

### **Telephone Survey**

#### *Respondent Sample and Procedure*

In the telephone survey, names, addresses, and phone numbers were selected at random on each block using the criss-cross directory. There is always some potential sampling bias involved in telephone surveys, but the threat is now considered to be minimal (Babbie, 1986). The survey was conducted over a 5-week period in the Spring of 1985. One selected organized block was accidentally excluded from the survey. The initial sample frame for the remaining 47 blocks was 2,794 potential respondents, 909 of whom were never contacted and 9 of whom were excluded as incomplete or duplicates of surveyed households. Of the remaining 1,876, 1,081 (58%) completed the survey. Of this final sample, 327 (30%) were active members of 31 active block associations, 422 (39%) were nonmembers or inactive members living on those same organized blocks, and 265 (25%) lived on 13 blocks without organizations. Sixty-seven (6%) lived on 3 blocks with either dormant or incipient block associations, as explained above. Survey responses confirmed that the residents of organized and unorganized blocks did not differ significantly in age, race, or socioeconomic status. The number of respondents per block ranged from 10 to 41 with a mean of 24. Sixty-five percent of all respondents were female; 47% were black, 47% were white, and the rest were Hispanic, Asian, or "other." Sixty-two percent owned their home. Of the renters, approximately 60% lived in apartment buildings and the rest lived in private homes. Twenty-nine percent were college graduates and 42% had a high school education or less. The sample was spread fairly evenly over

all adult age categories, with the mean approximately 42 years old; the median estimated annual family income was approximately \$19,000; the median length of residence was approximately 9½ years.

### *Variable Construction*

The telephone survey included items assessing residents' perceptions of block association activities (with each of the above divided between general and crime-related factors), recent victimization experiences, demographic variables, and other variables not analyzed for this article. Varimax-rotated factor analyses performed on all of the social climate scales confirmed them as coherent constructs. Scale items and alpha coefficients appear in the Appendix. All scales were computed using standardized (*Z*-scored) items to make all item response ranges comparable. Missing values on any of the four dimensions of participation (see below) were treated as a valid 0 value (i.e., reporting no block association on the block in the phone survey resulted in 0 participation for a given individual).<sup>4</sup> Missing values on all other variables were excluded at the individual level.

Demographic variables were selected for the present analyses to represent broad demographic domains: socioeconomic status/vested interest in the community (aggregated as mean income level and proportion of home owners), race (proportion of black respondents on the block), and community stability (mean length of residence).

The block-aggregated victimization variable combines (a) total individual and household criminal victimization on the block within the preceding 3 years plus (b) indirect or vicarious victimization (i.e., "knowing of someone on the block" who has been a victim of personal or property crime). In order to keep the length of the survey manageable, this scale differed from victimization protocols that are based on the National Crime Survey (e.g., Bennett & Lavrakas, 1988; Perkins & Taylor, 1987). The present survey used an open-ended format (as opposed to type-of-crime prompting) and disregarded multiple victimizations per individual.

All of the social climate variables came from the resident survey. Fear of crime was measured with a 2-item index of how safe the respondent felt

<sup>4</sup>Most of the "unorganized" blocks had at least one or two residents believing that there was a block association on the block or even claiming to have been involved in a block association activity at one time. This prompted a careful follow-up procedure to verify the presence or absence of an association on these blocks. Three were found to have some degree of organization (one past, one active and ongoing, and one just getting started). Similar to unorganized blocks, the three telephone survey dimensions alone were used to compute participation for these blocks since no member surveys were available.

being out alone on the block during the day and at night. Informal social control assessed the likelihood of a neighbor doing something about three different types of hypothetical threats or incivilities. Neighboring behavior was operationalized to include both giving and receiving various kinds of assistance (Unger & Wandersman, 1982). Sense of community was measured by a 12-item scale based on McMillan and Chavis's (1986) definition of the concept and the measure used by Chavis et al. (1986).

The following scales were confirmed in a factor analysis among participation-focused cognitive social learning variables: communitarianism, sense of community, perceived block association efficacy, block satisfaction, perceived incivilities, perceived crime problems. They were adapted from ones previously found to predict participation cross-culturally, using samples in the United States (Florin & Wandersman, 1984) and Israel (Wandersman, Florin, Friedman, & Meier, 1987). The two perceived community problems scales could serve as proxies for (objective) physical incivilities and crime, respectively. Instead, they are being treated as part of the social climate because they are based on subjective perceptions or attitudes and because more objective measures of incivilities and crime were available (see below). Although the last three scales were all part of Florin and Wandersman's (1984) construct "encoding strategies," the decision to treat them as separate variables in this study was supported by an individual-level factor analysis performed on the present data which did not find the components to clearly form a single, coherent construct.

For the present analyses, the dependent variable, participation in block association activities, was an interval-level scale constructed from two different sources of block-aggregated data: the resident telephone survey and a self-administered survey of all available block association members ( $N = 469$ ) on the 31 actively organized blocks. The participation scale consists of four equally weighted dimensions each aggregated by block: from the resident survey, (a) how active the association is perceived to be, (b) the mean time (hours per month) working for the association outside of meetings, (c) the mean level of different forms of organizational responsibility among residents in the preceding year, and (d) the mean of ten, more detailed, level of responsibility items from the block association member survey (see Appendix). We believe the use of a continuous, multidimensional scale from two different sources provides a more valid and reliable measure of block association participation than a simple dichotomy of organized/unorganized would be. In essence, this variable tells us not only what proportion of residents have participated at different levels of responsibility but also estimates the amount of time residents participate and uses the widest possible cross-section of information by including nonmembers' opinions of block association activity.

### Environmental Inventory<sup>5</sup>

A measure was developed for the purpose of assessing both the built and transient, crime and fear-related physical environment of urban residential areas (see Table I). The instrument represents a significant departure from the more common practice of relying solely upon the subjective reports of residents, which may suffer from method bias. In order to make the assessment as objective as possible, the Block Booster Environmental Inventory (BBEI) uses detailed observations by trained raters. The procedure was conducted in August 1985 on all 48 blocks in order to examine three types of cues in the physical environment that have been at least theoretically related to crime and fear of victimization: (a) physical incivilities (vandalism, litter, and graffiti), (b) territorial markers (e.g., property maintenance, dogs, personalizations, and yard decorations and gardens), and (c) defensible space features, including opportunities for passive street surveillance (building attachment, public lighting, sight lines, and trees and shrubs), barriers on and around the property, building size, and places to sit outdoors. Some items were excluded from the present analyses for obvious redundancy with the dependent variable (e.g., block-watch signs).

The instrument concentrates entirely on the inanimate physical environment. Social incivilities were excluded because obvious signs of serious social disorder (such as overt drug dealing and prostitution) are generally so sporadic or time-of-day specific that they could easily be missed or overstated by a single visit to a block. Although less serious social incivilities (such as loitering youths) may concern residents, we felt that it would be invalid, unreliable, and not in keeping with the emphasis on objectivity, for outside raters to try to judge whether observed behaviors might qualify as incivil in a given social setting.

During the training of two research assistants and pilot testing of the instrument on 10 nonstudy blocks, three-way (including the trainer) interrater agreement was computed two ways: as a proportion of exact agreement among all raters and as a mean intraclass correlation among three combinations of rater pairs. Agreement for block-level items was computed at the block level and agreement for property-level items was computed at the property level ( $n = 48$ ). Reliability was strong for the overall measure and was acceptable for most items used in the present analyses (see Table I).

<sup>5</sup>The Block Booster Environmental Inventory used in the present study has undergone further conceptual and psychometric development (Perkins et al., 1989). A copy of the latest version of the revised "Block Environmental Inventory" can be requested from the first author.



**Table I.** Reported Crime and Environmental Variable Ranges, Means, Standard Deviations, and Pretest Reliability<sup>a</sup>

Variable	Range	Mean	SD	Pretest: % Exact 3-way agreement	Mean inter- rater <i>r</i>
Reported crime rate (3 months)	0-18	5.60	4.14	NA	NA
Block-level assessment					
built environment					
Street width (in lanes)	3-5	3.42	0.54	100	1.00
Proportion attached buildings	0-.99	0.40	0.39	63	.99
Property-level assessment	Based on 12 properties assessed)				
Built environment					
Visibility of 1st floor windows	9-12	11.99	1.30	88	.50
Barrier on property	2-12	8.92	2.65	(not pretested)	
Barrier around property	0-12	3.96	3.13	96	.91
Public (street) lighting	2-12	5.98	2.52	88	.83
Transient environment					
Incivilities					
Litter on/near property	0-3	0.71	0.97	92	.70
Graffiti on public property <sup>b</sup>	0-9.67	3.07	1.80	27	.90
Territoriality					
Exterior maintenance	9-12	11.38	.73	85	.40
Dogs (dog house, beware sign)	0-5	.71	1.05	92	.81
Trees, shrubs, garden on property	1-12	9.98	2.85	96	.86
Street (public) trees	2-10	5.88	2.18	90	.86
Mean				83	.80

<sup>a</sup>The *N* of blocks for the range, mean, and standard deviation is 48. The interrater reliability coefficients were computed on 10 separate pretest blocks (for the block-level items) and on 48 properties (for property-level items). they represent the percentage exact agreement among 3 raters and the mean of the 3 interrater (intraclass) correlations.

<sup>b</sup>Graffiti on public property is a block-level count which for the present analyses was made proportionate to the 12-property checklist. The interrater reliability coefficients on this item are for the total block count, which is why the exact agreement is low but the intraclass correlation is high.

The procedure took 45 to 60 min to complete for a given block, depending on the block's size, and involved a single rater<sup>6</sup> walking around the block once, indicating street width in lanes and taking a count of building attachment and size category. Meanwhile, raters also kept a tally of all incidents of damage or graffiti on public property and any abandoned buildings and cars, type of nonresidential building, public gardens, playgrounds, and block identifiers or "blockwatch" signs. In order to evaluate residential proper-

<sup>6</sup>For the sake of interrater reliability, it is always best to use a pair of raters on each block. A scarcity of available personnel prevented such a procedure in the present study. This is not a great concern, however, because the level of interrater agreement appears to be one of the strongest features of this and subsequent iterations of the instrument (cf., Perkins et al., 1989).

ties with sufficient precision, the raters then walked the block a second time to fill out a 20-item checklist on every third property until they reached a total of 12 properties assessed. To avoid bias, raters did not know whether or not a block was organized.

### Official Police Crime Data

The research team was allowed the rare opportunity to collect data on officially reported crime at the Central Records Division at the New York City Police Department (NYPD). Rates of reported crime were collected and analyzed at the block level ( $n = 48$ ). This differs from most previous studies which typically rely on aggregated precinct or city-level data (if police data are available at all). For the present analyses, crime data were collected for February, March, and April 1985, the period immediately preceding and during the telephone survey. Six trained coders identified crimes occurring on any of the study blocks and recorded the type of crime, and the date, time, and place of occurrence from the NYPD Crime Complaint Index Form, which included all types of felonies and misdemeanors and both citizen-initiated complaints and those filed by an officer without a civilian report.

## RESULTS

We approached the present data analysis by examining the bivariate correlations of individual variables with collective participation. Partial correlations were used to test the validity of these relationships by controlling for demographic influences. Based on these results, a multiple regression analysis was used to test a reduced, recursive version of the proposed model's ability to predict block-level participation. (Due to the small  $n$  at the block level of analysis and multicollinearity among the predictors, a full-model regression would be difficult to interpret.) Representative variables from each set were entered hierarchically consistent with the model as predictors of participation.

The full Pearson correlation matrix appears in Table II and the results of the reduced-model, hierarchical regression predicting level of participation appear in Table III. In Table II, participation is correlated with a wide variety of social climate constructs and with built and transient physical environment items. Furthermore, most of the correlations remain significant even after partialling out demographic influences, such as mean block income, length of residence, and racial composition. Our block-level results corroborated the finding that, within a general income level, minority status

is related to participation ( $r = .22, n = 47, p < .10$ ). This may be an artifact of our sampling strategy of seeking organized minority neighborhoods, however. Although length of residence, home ownership, and income were not significantly related to participation at the block level of analysis, all were positively related to individual-level participation ( $r = .21, n = 1,059, p < .001$ ;  $r = .22, n = 1,031, p < .001$ ; and  $r = .10, n = 833, p < .005$ , respectively). (Individual-level participation consisted of only the mean time working for the association and mean level of responsibility dimensions, both from the resident survey.)

Block-level participation was correlated with such features in the built environment as fewer barriers on (as opposed to around the perimeter of) residents' property and greater street lighting and (unexpectedly) street width. Possibly due to its intentionally limited range on our sample blocks, residential building size was unrelated to most of the variables in the model and so was left out of the matrix. Even in this sample, however, larger buildings were associated with higher reported crime ( $r = .34, p < .01$ ) and less individual ( $r = .64, p < .001$ ) and collective ( $r = .25, p < .05$ ) crime prevention behaviors.

Block-level reported crime and surveyed victimization rates were not significantly related to collective participation. Nor were any of the crime-related social climate variables: fear of crime, perceived crime problems, and informal social control.<sup>7</sup>

As expected, among the remaining social climate scales, neighboring, perceived incivilities, block satisfaction, and perceived block association efficacy were significantly and positively correlated with block-level participation. The finding that block satisfaction and perceived incivilities were both *positively* related to participation suggests that satisfaction and a perceived *lack* of problems should not be combined as one variable even if they are related to each other (cf. Florin & Wandersman, 1984). Sense of community had a nonsignificant zero-order correlation with participation, but its partial correlation was significant. Contrary to our hypotheses, communitarianism was not significantly related to participation.

In the transient environment, evidence of dogs was positively associated and exterior maintenance and trees, shrubbery, and gardens were (unexpectedly) negatively associated with collective participation. Objective

<sup>7</sup>Some studies have found that fear of crime is positively and linearly related to individual, defensive behaviors but curvilinearly related to collective action, with the greatest collective participation stimulated by moderate amounts of fear—just enough that residents are neither paralyzed nor too complacent (Cohn, Kidder, & Harvey, 1978). This curvilinearity hypothesis was tested using an ANOVA design at the individual level of analysis. The Student–Newman–Keuls procedure verified that no two of the five groups with different levels of fear differed significantly in participation.

**Table II.** Pearson Correlations Among Demographics, Block Association Participation, and Environmental Items (Top) Controlling for Income, Length of Residence, and Racial Composition

	1	2	3	4	5	6	7	8	9	10	11
1. Participation						—	—	.23	—	-.35	—
Demographics											
2. Residence years	—										
3. % Nonwhite	.21	—									
4. Income	—	—	-.57								
5. Home ownership	—	.49	.45	—							
Built environment											
6. Attached bldgs.	—	—	-.65	.30	-.31		.28	-.31	—	.43	—
7. Visible window	—	—	-.44	.36	-.26		.44	—	-.24	.24	—
8. Street lighting	.28	—	.42	-.38	—	-.40	-.33	—	—	-.33	—
9. Street width	.23	.45	.43	—	.47	-.34	-.31	.26	—	—	-.32
10. Barrier on prop.	-.40	-.38	-.62	.29	-.50	.60	.39	-.43	-.51	—	—
Crime rate											
11. Victimization	—	—	.20	-.22	—	—	—	—	-.23	—	—
12. Reported crime	—	-.32	-.32	—	-.32	.19	—	—	—	.24	—
Social climate											
13. Block satisfac.	.31	—	-.35	.34	—	.39	—	—	—	—	-.37
14. Fear of crime	—	—	.71	-.49	.27	-.60	-.41	-.39	.27	-.56	.33
15. Social control	—	.43	—	.23	.29	.30	.25	-.30	—	—	—
16. Sense of commun.	—	.60	-.30	.33	.25	.34	.21	—	.19	—	-.23
17. Neighboring	.48	.38	.27	—	.42	—	—	.19	.39	-.46	—
18. Communitarianism	—	—	.60	-.34	.27	-.30	—	.32	.23	-.32	.22
19. B.A. efficacy	.30	—	.34	-.20	—	—	—	.40	.28	-.26	—
20. Perceived crime	—	-.36	—	-.38	-.21	-.26	-.26	—	—	—	.41
21. Perceived incivility	.33	—	.28	-.28	—	-.33	-.26	—	.19	-.32	—
Transient environment											
22. Litter	—	-.45	.40	-.38	-.22	-.25	—	—	—	—	.30
23. Public graffiti	—	-.52	—	—	-.37	—	—	—	—	—	—
24. Trees, garden <sup>a</sup>	-.25	—	—	—	.35	-.25	—	—	—	—	—
25. Ext. maintenance	-.28	—	—	—	—	—	.22	—	—	—	—
26. Dogs	.23	.22	—	—	.28	—	—	—	—	—	—

<sup>a</sup>Pearson correlation coefficients appear below the diagonal and partial correlation above the diagonal;  $n$  of blocks = 48 for all pairs of environmental and official crime significance levels are as follows:  $r = .19$  ( $p < .10$ ),  $r = .25$  ( $p < .05$ ),  $r = .34$

<sup>b</sup>This variable combines trees, shrubs, garden on property, and public "street" trees.

incivilities (from the BBEI), such as litter and graffiti, were not significantly related to participation. Unlike the results of Perkins et al. (1989), the only relationship between resident perceptions of incivilities and actual (objective) incivilities is a negative partial correlation with public graffiti (controlling for income, length of residence, and racial composition).

A full-model hierarchical multiple regression predicted over 90% of the variance in participation. Due to the large number of variables and relatively small number of blocks, however, the size of the model had to be trimmed substantially in order to keep the multiple regression analysis (Table III) as parsimonious as possible. The rationale behind reducing the regression model was to use the partial correlations of the individual predictor variables (top row of Table II) to select one built environmental item, one transient environmental item, and, because of the larger number of variables in the set,

Defensible Space, Crime Rate, Social Climate, and Transient Environment, and Partial Correlation of Residence, and Proportion Nonwhite<sup>a</sup>

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
—	.42	—	—	.27	.45	—	.26	—	.31	—	—	-.34	-.26	.20
—	.24	-.27	.22	—	—	—	—	—	-.22	—	—	-.21	-.28	-.32
-.35	—	—	—	—	—	—	—	—	—	—	—	—	.21	—
—	—	—	-.29	—	—	—	.31	—	—	—	—	—	—	—
—	.21	—	—	—	—	—	.21	—	—	—	-.21	—	—	—
—	—	-.30	—	—	-.26	—	—	-.32	-.29	—	—	—	—	-.24
—	-.31	.26	—	—	—	—	—	.36	—	.20	—	—	.20	—
—	—	—	—	—	—	.24	.20	—	—	—	.27	-.25	—	—
—	—	-.33	—	.57	.24	—	.29	-.31	-.23	-.08	—	-.27	—	—
-.22	-.48	-.46	-.41	-.46	—	-.22	-.26	.35	—	—	—	—	—	—
—	.25	-.42	-.49	.49	.30	.28	—	—	—	—	—	-.25	—	.28
—	.54	-.49	.65	.32	.30	.41	-.36	—	—	—	—	-.34	—	-.20
—	—	—	.35	.35	.29	—	.38	.43	-.32	—	—	-.29	—	—
—	—	.30	—	—	.39	.31	—	—	-.22	.16	—	—	—	-.35
—	—	—	—	—	—	.43	—	-.23	-.22	—	.41	—	—	—
—	-.39	.39	-.29	-.55	.19	—	—	.62	—	—	—	—	—	.22
—	-.33	.31	—	-.25	.39	—	—	.63	—	—	-.27	—	-.27	.30
—	-.25	.25	-.42	-.50	-.29	—	—	.29	—	—	—	—	-.29	—
.37	—	—	-.27	-.28	—	—	.35	.25	—	—	—	—	—	—
-.32	-.25	.20	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	-.28	-.29	—	—	—	-.26
—	—	—	.31	—	—	-.19	—	—	.28	—	—	—	—	—

coefficients controlling for income, length of residence, and proportion nonwhite appear rate variables, otherwise  $n = 47$ ; Only significant coefficients appear. Pearson correlation ( $p < .01$ ),  $r = .44$  ( $p < .001$ );  $p$  levels for equivalent partial correlations are slightly higher.

two social climate scales to represent their respective domains and then enter them in hierarchical stages. With regard to the built environment, the obvious feature to choose was barriers on the property. There was little theoretical-basis upon which to decide the relative hierarchical priority of the social climate and transient environment. According to our model, the social climate and transient physical environment are equally “transient” and proximal to participation. Since the survey which measured the social climate variables was administered approximately 4 months prior to the physical environmental assessment, the former were entered into the regression before the transient physical environment predictor (by contrast, the built environment was most likely unchanged since the survey and so was entered prior to the survey variables). Since three social climate variables had partial corre-

lations greater than  $r = .30$ , all three were selected. Due to multicollinearity between neighboring behavior and lower perceived incivilities ( $r = .43$ ), however, these two variables were entered separately with block satisfaction into two otherwise identical equations. Among transient environmental predictors, although trees and gardens had the strongest partial correlation with participation ( $r_{(ij.k)} = -.34$ ), it also correlated significantly with two of the social climate variables already selected and so exterior maintenance was selected.

In the first stage of the regression, three demographic variables were selected for entry to control for block stability (length of residence), race (proportion nonwhite), and socioeconomic status (income). As a set, the three demographic variables did not significantly predict block participation. In the next stage, barriers on the property shared a significant amount of variance with participation ( $R^2 = .11, p < .05$ ), independent of demographic influences. In equation 1, block satisfaction and neighboring behavior were then entered and together contributed significantly ( $R^2 = .23, p < .005$ ) to the regression, beyond the influence of the "permanent" predictors. In equation 2, substituting perceived incivilities for neighboring, the social climate set was again significant ( $R^2 = .26, p < .001$ ). In the final stage, exterior property maintenance contributed 7% ( $p < .05$ ) additional variance to equation 1 and 5% ( $p < .10$ ) to equation 2, independent of all the prior sets of variables. In each equation, the four predictors all had significant final beta weights and together explained almost 40% of the variance in participation ( $p < .001$ ), even after controlling for the influence of race, income, and length of residence.

In sum, the permanent and transient physical environment and the social climate all correlated significantly with collective participation after controlling for demographic influences. In addition, representative variables from each of those sets contributed significant and independent variance to the regression predicting aggregate participation in block associations.

## DISCUSSION

The purposes of this study were (a) to present a block-level model of crime-related social and physical environmental predictors of collective participation in block associations, (b) to introduce a new method for objectively measuring the physical environment of residential blocks, and (c) to test both the model and the method for their ability to explain a significant portion of block-level variance in participation. Although the most explicitly crime-related factors in the model were unrelated to participation, our results suggest that the built environment, the social climate, and the tran-

Table III. Multiple Regressions Predicting Block Association Participation<sup>a</sup>

Cluster	R <sup>2</sup> increment	Variable	Final beta	Final t value
<b>Equation 1</b>				
Demographics	.053 (ns)	Income	-.102	-0.70 (ns)
		Length of residence	-.153	-1.12 (ns)
		Proportion nonwhite	-.054	-0.29 (ns)
Built environment	.113 ( <i>p</i> < .05)	Barriers on property	-.371	-2.12 ( <i>p</i> < .05)
Social climate	.225 ( <i>p</i> < .005)	Block satisfaction	.375	2.84 ( <i>p</i> < .01)
		Neighboring	.287	2.02 ( <i>p</i> = .05)
Transient environment	.071 ( <i>p</i> < .05)	Exterior property maintenance	-.275	-2.27 ( <i>p</i> < .05)
Adjusted <i>r</i> <sup>2</sup> = .366, <i>F</i> (7, 39) = 4.79, <i>p</i> < .001				
<b>Equation 2</b>				
Demographics	.053 (ns)	Income	-.057	-0.39 (ns)
		Length of residence	-.015	-0.12 (ns)
		Proportion nonwhite	.043	-0.23 (ns)
Built environment	.113 ( <i>p</i> < .05)	Barriers on property	-.326	-1.81 ( <i>p</i> < .10)
Social climate	.255 ( <i>p</i> < .001)	Block satisfaction	.500	3.87 ( <i>p</i> < .0005)
Transient environment	.047 ( <i>p</i> < .10)	Perceived incivilities	.301	2.14 ( <i>p</i> < .05)
		Exterior property maintenance	-.233	-1.86 ( <i>p</i> < .10)
Adjusted <i>R</i> <sup>2</sup> = .373, <i>F</i> (7, 39) = 4.92, <i>p</i> < .0005				

<sup>a</sup>*n* of blocks = 47; listwise deletion.

sient physical environment are significantly and independently related to collective participation in block associations.

The Block Environmental Inventory proved to be a reliable instrument for describing community settings in a way that can be usefully related to indicators of social climate, crime, and demographics as well as participation. The finding that perceived and actual physical incivilities were, if anything, negatively related is contrary to results by Perkins et al. (1989) and suggests that future research should investigate the locus of these differences: Are they due to different survey measures? Different environmental measures? Different populations? Different cities? The lack of convergence of objective and subjective incivilities also underscores the importance of in-person observation of community research sites. Many researchers are content to have their data collected *in absentia*, without ever setting foot inside the study area, thereby risking misinterpretation of the data and losing a rich source of additional data.

The fact that length of residence, home ownership, and income were all positively related to individual-level, but not block-level, participation suggests that (a) poor and residentially unstable communities *can* develop a level of participation equal to other communities, but (b) *within* a given community, those individuals with more resources and a greater vested interest in property are still more likely to participate. More important, the present study suggests that *the social and physical environment of the community is more important for block-level participation than are demographic characteristics or crime-related problems, perceptions, and fears.*

The encouraging implication of this finding is that it gives community organizers and leaders something to work with in the inevitable challenge to increase and maintain participation. As suggested by the positive correlation found between perceived problems and fear, simply informing residents about crime and other problems, as single-issue and less active community organizations often do, may only make them afraid and/or pessimistic about solving them. There is little one can do to manipulate the demographic characteristics of one's community, aside from moving. Nor is it easy to reduce an entrenched crime or drug problem at the grass-roots level. But, with the help of even a fledgling community development organization, the social climate, transient physical environment, and even the micro built environment are somewhat easier to change. For example, a block cleanup activity can be used to elicit participation directly and indirectly, by enhancing residents' block satisfaction and encouraging neighboring behavior.

The lack of significant cross-sectional correlations between block-level crime, victimization, fear of crime, perceptions of crime, and informal social control on the one hand and collective participation on the other is noteworthy. It suggests that crime may not be the most effective issue around



which to organize even urban communities that are understandably concerned about crime. Whether or not crime is much of a factor in multi-issue organizing, participation is clearly related to other environmental and, particularly, social benefits. These benefits may buffer the emotional impact of participants' heightened perception of incivilities. Indeed, the fact that there was no significant zero-order correlation between fear and participation is actually an improvement over the effects of traditional victimization prevention programs which have often been shown to increase members' fear. Longitudinal, quasi-experimental research is needed, however, to determine whether multi-issue organizations can, over time, reduce urban crime, fear, and disorder. Because crime reduction has been such an elusive finding—one that may depend on larger-scale intervention—and because of the difficulties inherent in measuring crime, many researchers may wish to focus on issues other than crime to assess the impact of participation.

Several of the environmental items expected to be positively related to participation turned out to be negatively related. Defensible space theory recommends the erection of barriers, not only to physically exclude outsiders but to promote a sense of ownership and use of the enclosed space and thus greater social contact. But the exact placement of barriers may be critical. Our data suggest that barriers *on* private property, as opposed to around public areas, may discourage social contact and cohesion and thus participation.

Other studies (e.g., Podolefsky, 1983) have found a negative relationship between the informal social cohesion of a community and the extent of formal participation in the community, as if the latter is an attempt to lend order to the community artificially. *We found participation in block associations positively associated with social cohesion*, however. But the idea of a compensatory effect of participation suggests another possible interpretation of our contrary environmental results, including the negative relationship of collective participation to the two territorial markers (exterior maintenance and trees, shrubbery, and gardens). Perhaps participation in a community organization can be viewed in part as compensation for certain weaknesses in the *physical* environment. Communities with no environmental problems may not need to organize. But where residents perceive incivilities or find their block lacking in physical barriers or territorial symbols, if they also have sufficient social cohesion (as evidenced by block satisfaction and neighboring, for example) they may organize and participate to fulfill these needs in other ways. Whether or not they are successful at alleviating the original problem, once organized and active, participants in block associations often work to improve other aspects of the community.

The interactive nature of the relationship between the more transient social and physical environment and citizen participation often makes it difficult

to determine which causal direction predominates at any given time or place or with any given environmental variable. The strong, bidirectional relationship between participation and its psychological predictors has also fueled confusion over the exact meaning of "empowerment." Our model and block level of analysis suggest one possible clarification of this ambiguous concept. Zimmerman and Rappaport (1988), in an effort to distinguish psychological empowerment from other aggregated levels of empowerment, defined the former as "the connection between a sense of personal competence, a desire for, and a willingness to take action in the public domain" (p. 725). They do examine citizen participation as a predictor of psychological empowerment and their measure of empowerment includes political efficacy and civic duty as well as cognitive and personality dimensions. Still, both their measure of empowerment and the above definition seem dominated by an individualistic psychological orientation, as opposed to a community psychological or ecological orientation. Just as the environment and social climate may act as catalysts for participation and just as organizations may set the conditions that allow social support to emerge, empowerment occurs in a context. It is perhaps not surprising that, controlling for more permanent social and physical environmental characteristics, our community-oriented aggregated psychological variables, such as neighboring, and satisfaction with community, predicted our participation measure, which was itself explicitly community-oriented.

On theoretical grounds alone, however, we feel that empowerment, even at the psychological level, should have a clear communitarian, or collectivist, orientation. This would have the conceptual benefit of distinguishing empowerment from self-efficacy and internal locus of control. It might also have the practical benefit of focusing interventions on collective action, which is likely to be more effective than individual action in solving collective problems.

As usual, many questions remain unanswered. Additional constructs and measures are needed to enhance our understanding of the context of participation. Analysis of the determinants of participation in other kinds of grass-roots organizations (e.g., tenants' associations, unions, or self-help groups) is also needed to develop confidence in interpretations. Longitudinal research could help sort out the problem of causal direction between participation and its ecological context.

Meanwhile, grass-roots leaders are not waiting for the empirical solution to the causal direction problem; they will continue to engage the social and physical environment in order to elicit greater participation and to use participation to enhance the social and physical context of their communities. Community psychologists and others interested in promoting community development can assist them by identifying, as precisely as possible, both the

environmental and the psychological correlates of participation so that community organizers and service providers can know which realistic strategies are most likely to facilitate resident involvement in community organizations. Moreover, researchers can strive to firmly establish the effects of participation on community conditions so that public policy debate over the use of community organizations to combat social problems can be empirically informed. Strong evidence that general-purpose voluntary associations can play a role in stabilizing neighborhoods and promoting community development could arm advocates of empowerment with persuasive arguments for investing social resources in the encouragement of community organizations which contribute to individual and group empowerment.

In 1962, Greer argued that knowledge of the dynamics between neighborhood conditions and individual characteristics is required to adequately understand social behavior in its myriad ecological and issue contexts. It is time that participation and empowerment researchers and other social scientists take that dictum as axiomatic. Too often we ignore the community-level context of social phenomena in an effort to examine the presumed essence of the behavior, as if it could be isolated from its setting or the issues which motivate people. Far from helping us derive universal laws of community behavior, however, a "context-free" focus obscures the very meaning of the behavior we wish to understand and thus hinders effective, collaborative intervention.

## APPENDIX

### Telephone Survey Items<sup>a</sup>

#### *Demographics*

Thinking about your total family income in 1984, which of the following categories did it fall into? (5)

What was the highest level of education you completed? (7)

Which of the following categories describes your race? (5)

How long have you lived at this address? (4)

Do you own your home or are you renting? (2)

Block standard deviation (diversity) of length of residence. (Continuous)

<sup>a</sup>The number of valid response categories appears in parentheses.

### *Victimization*

Have you or any member of your household been the victim of a crime in the past three years? (2)

What was the crime? (8)

How long ago did this happen? (4)

Did this crime happen on this block, elsewhere in this neighborhood, or at some other place altogether? (3)

Do you know of anyone living on this block who has had their home broken into in the past year? (2)

Do you know of anyone who has been assaulted while on the street on this block in the past year? (2)

### *Social Climate*

*Sense of Community* (alpha = .80,  $n = 720$ ; True/False)

I think my block is a good place for me to live.

People on this block do not share the same values.

My neighbors and I want the same things from the block.

I can recognize most of the people who live on my block.

I feel at home on this block.

Very few of my neighbors know me.

I care about what my neighbors think of my actions.

I have almost no influence over what this block is like.

If there is a problem on this block people who live here can get it solved.

It is very important to me to live on this particular block.

People on this block generally don't get along with each other.

I expect to live on this block for a long time.

*Communitarianism* (alpha = .68,  $n = 1,009$ )

Would you say that it is very important, somewhat important or not important to you to feel a sense of community with the people on your block? (3)

How important is what your block is like to you? (3)

How important is it that people on your block work to improve block conditions? (3)

How important is it to you that you be actively involved in any efforts that residents might make to improve your block? (3)

*Perceived Block Association Efficacy* (alpha = .82,  $n = 901$ )

(If a block association was formed here) how likely is it that the association could accomplish each goal: (3)

Improve physical conditions on the block like cleanliness or housing upkeep?

Persuade the city to provide better services to people on the block?

Get people on the block to help each other more?  
 Reduce crime on the block?  
 Get people who live on the block to know each other better?  
 Get information to residents about where to go for the services they need?  
 Provide programs for young people on the block?

*Block Satisfaction* (alpha = .59,  $n = 818$ )

How satisfied are you with this block as a place to live? (2)  
 Comparing your block to other blocks in the area, is your block a better place to live, a worse place to live or about the same? (3)  
 In the past two years, have the general conditions on your block gotten worse, stayed about the same or improved? (3)  
 In the next two years, do you feel that general conditions on your block will get worse, stay about the same or improve? (3)

### *Perception of Block Problems*

Please tell me if (each of the following) is a serious problem, a minor problem or no problem at all on your block: (3)

*Perceived Crime/Delinquency Problems* (alpha = .78,  $n = 813$ )

Vandalism (eg: breaking windows, painting on cars or walls)?  
 Drug dealing?  
 Groups of young people hanging around?  
 Robbery or assault of people on the street?  
 Burglary of homes when people are away?

*Perceived incivilities* (alpha = .65,  $n = 1,052$ )

People who don't keep up their property?  
 Poor sanitation services (e.g., trash collection, sewers)?  
 Litter?

*Fear of Crime* (alpha = .62,  $n = 1,056$ )

How safe would feel being out alone on the block during the day?  
 How safe would feel being out alone on the block at night?

*Informal Social Control* (alpha = .59,  $n = 720$ )

If someone on the block was letting trash pile up in their yard or on their steps, how likely is it that a neighbor would go to that person and ask that they clean up? (2)  
 If some 10 to 12-year-old kids were spray painting the sidewalk on the block, how likely is it that some of the neighbors would tell them to stop? (2)  
 If a suspicious stranger was hanging around the block, how likely is it that some of the neighbors would notice this and warn others to be on guard? (2)

*Neighboring Behavior* (alpha = .76,  $n = 999$ )

Neighboring given: In the past year, have you been asked to do (each of the following) for one or several of your neighbors on this block: (9)

Watch a neighbor's house while they are away?

Loan a neighbor some food or a tool?

Help a neighbor in an emergency?

Offer a neighbor advice on a personal problem?

Discuss a problem on the block with a neighbor?

Neighboring received: Which, if any, of the things on (the above) list has at least one of your neighbors on this block done for you in the past year? (2)

### *Participation in Block Association Activities<sup>b</sup>*

Would you say that this block association is very active, moderately active or largely inactive? (3)

Have you ever taken part in an activity sponsored by the block association? (2)

How many hours would you say you give to the block association each month outside of meetings, if any? (9)

In the past year, have you:

Served as an officer or as a committee chair? (2)

Attended a meeting? (2)

Spoken up during a meeting? (2)

Done work for the organization outside of meetings? (2)

Served as a member of a committee? (2)

<sup>b</sup>The block-level participation measure also includes several items from the block association member survey: the last four items above and six others: In the past 12 months, have you:

Helped organize activities (other than meetings) for the association? (2)

Participated in activities other than meetings (block party, cleanup)? (2)

Tried to recruit new members? (2)

Tried to recruit new members? (2)

Tried to get people out for meetings and activities? (2)

Served as a representative of the association to other community groups? (2)

Worked on other block association activities? (2)

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