

**DYSFUNCTION IN THE URBAN SYSTEM:
AN EVALUATION OF NEIGHBORHOOD
CRIME PREVENTION IN TULSA, OKLAHOMA**

N. M. CONNELLY

Government Service, London, England

K. D. HARRIES

Department of Geography

University of Maryland, Baltimore County

D. T. HERBERT

Department of Geography

University College of Swansea

Swansea, Wales, U.K.

ABSTRACT

Two neighborhoods in Tulsa, Oklahoma, highly comparable in terms of their socioeconomic and built environments, were evaluated on the basis of their crime victimization experience and other attributes relating to attitudes toward crime and security. One neighborhood had been the subject of a neighborhood crime control project, while the other had not. Generally, there were no significant differences between the neighborhoods for any of the social or crime victimization measures evaluated. The analysis suggested that the crime control program was not particularly effective in this context.

INTRODUCTION

Prior to the 1970s, research in criminology was centrally concerned with the motivations and predispositions of offenders to commit crimes; any policy links which could be related to such research were directed towards offenders and their punishment. During the 1970s, and partly in response to a resurgence of interest in what has become known as environmental criminology [1], far more attention has been given to potential victims and targets, and crime

prevention has guided policy reactions to a greater extent. Concern with the urban microenvironment, including consideration of the architecture of buildings and landscapes, small area population characteristics, political organization, and neighborhood context, has brought some questions of *environmental criminology* squarely into the realm of the urban geographer. Newman's patently geographic concept of "defensible space" attracted a great deal of attention, and promulgated modification of the conceptual thrust of crime prevention, by suggesting that residential environments could be made more resistant to crime through design modifications [2]. Newman initially appeared to overstate the role of physical design and was criticized on these grounds. However, a more balanced approach to crime prevention, taking fuller account of social factors, has subsequently developed.

Community crime prevention programs may be viewed in the context of a general reassertion of the roles of neighborhood associations and of local community as a basis for action [3]. Typically, community residents, either individually or collectively, are used as a resource in an effort to prevent and reduce crime, and to foster the emergence of safer, more liveable neighborhoods—part of what has been referred to as the "neighborhoodization" of urban life [4]. The concept of community crime prevention has little theoretical base, however, and in practice such schemes appear to have been quite varied in their effects.

At its most general level, the program which leads to such projects is little more than an act of faith which assumes that involving people in the security of their own neighborhood has effects that are both good for neighborhood morale and counter-criminogenic. Furthermore, the dollar costs of such programs has been minimal, since they mostly involve voluntary labor and extant police departments. Servicing requirements of individual projects are small and are mainly concerned with coordination. To date, there have been few attempts to evaluate projects, though it is likely that their initiation and success will vary considerably with, for example, the socioeconomic characteristics of neighborhoods and their crime histories. A geographic approach to evaluation can involve comparisons between "target" and "control" neighborhoods in an area sampling framework. A comparison of an area having a crime prevention program with another area which has not, particularly where other sources of variation between areas are controlled, provides an effective approach to evaluation. The current analysis offers one example of evaluation using an approach which is to be replicated both within the United States and elsewhere. This example serves to demonstrate how concepts derived from urban geography can contribute to theoretical developments in both evaluation research and *environmental criminology*.

This article investigates the impact of a community crime prevention program in a one quarter square mile (0.65 km²) middle-class neighborhood in Tulsa, Oklahoma, henceforth referred to as the "target area." The basis for

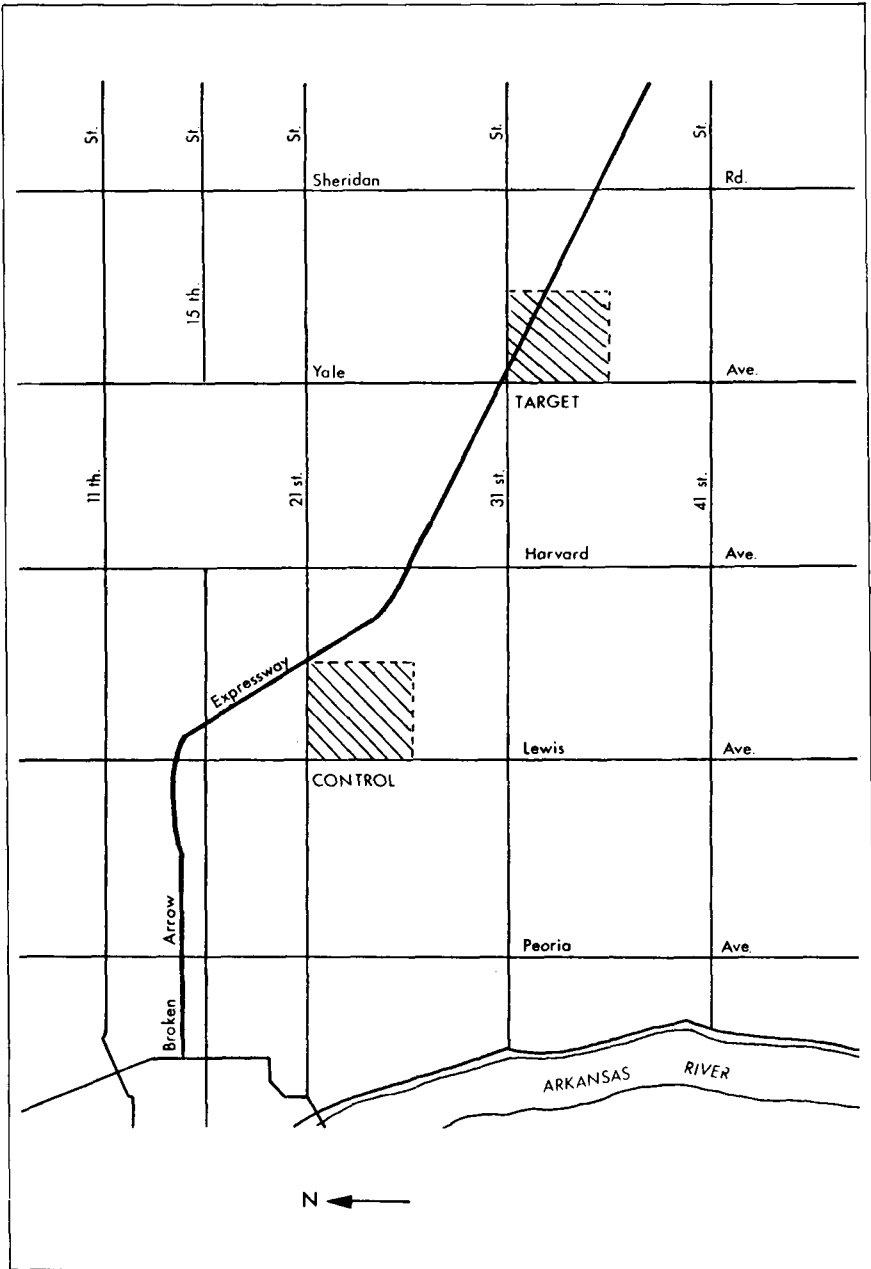


Figure 1. Locations of the Target and Control Areas.

comparison was a similar neighborhood which had not been the subject of crime prevention (referred to as the "control"). Based on the assumption that the only major difference between the environments of the two areas was that one had been the subject of a crime prevention program, the control could be used to compare the effects of the crime prevention program in the target area. The study areas were located on the south side of the city and were separated by about one and a half miles (2.4 km). Their relative locations are shown in Figure 1. The two study areas were selected on the basis of the similarity of their socio-economic and built environments.

LITERATURE REVIEW

Several studies have considered participation in crime prevention programs. Lavrakas found that residential status was an important variable relating to participation in crime prevention programs [5]. Homeowners were more likely than renters to attend crime prevention meetings, because the former had a greater financial and psychological investment in their homes than the latter. This investment also meant that householders were motivated to employ crime prevention measures without having been victimized. Renters, on the other hand, needed to have been victims of crime to be provoked into the employment of better security practices.

Lavrakas and Herz investigated differences between participants and non-participants in crime prevention programs [6]. They found that neither fear of crime, perceived risk of burglary or robbery, actual victimization experience, nor perceived risk of victimization, differentiated participants from non-participants in crime prevention programs. The majority of participants were members of community-based organizations which dealt with crime. Despite this involvement in crime, many of these community-based organizations had been initiated for reasons other than crime prevention.

Similar conclusions to those of Lavrakas and Herz were reached by DuBow and Podolfsky [7]. They found that involvement with community-based organizations aimed at crime prevention was related to degree of social integration. The greater an individual's integration into the neighborhood (through having ties resulting from having children, owning homes, and duration of residency) the more likely they were to be involved in community groups.

Community crime prevention programs were funded initially with federal monies distributed by the Law Enforcement Assistance Administration, now superseded by the National Institute of Justice. McPherson and Silloway were critical of the effect that this federal funding had upon many crime prevention programs [8]. Federal involvement in planning and development had an adverse effect on citizen participation and the ultimate success of the programs; federal involvement mitigated against adaptations in the programs that could have allowed the accommodation of local needs. Communities did

not develop their own problem definitions, and the programs to solve these problems. Community crime prevention efforts became distorted to the point where the programs reflected federal approaches to the crime problem, rather than locally identified problems and solutions.

Community crime prevention programs try to prevent crime and the fear of crime by reducing opportunities for victimization. Lewis and Salem found that this victimization perspective has many limitations [9]. It is commonly accepted that fear is induced by indicators of social disorganization reflecting a community's inability to exert social control. Examples of such indicators are abandoned buildings, loitering teenagers, and vandalism. Many crime prevention programs dealt with crime *per se* rather than with the conditions underlying the indicators of social disorganization. This implied a perspective that saw crime as a discrete phenomenon, disengaged from the social spaces in which it occurred. Lewis and Salem called for a social control perspective, organized around multi-issue community programs designed to deal with the indicators of social disorganization. Programs dealing with crime alone, they suggested, may be too narrow in outlook to have a significant impact on crime.

Norton and Courlander examined the effect of a crime prevention program on behavior linked to security consciousness and fear of crime [10]. The program they examined was aimed at the elderly. The major finding was that there was a significant positive relationship between the impact of the program on security consciousness behavior and the fear of crime. This relationship was thought to exist because elderly people with a low level of fear suffered vicarious victimization by coming into contact with seniors who had a high level of fear. This high level of fear could have been caused, for example, by having been a victim of crime. It was concluded that crime prevention programs may create an environment that increases security, but at the same time increases fear.

In general, the literature presents a clouded view of crime control through citizen action. Public policy directed to enhancing public awareness of crime problems, with the intent of improving security through better awareness, security, and surveillance, runs the distinct risk of increasing fear and failing to generate a net improvement in quality of life. Neighborhood watches seem intuitively appealing in that the "thin blue line" is augmented through citizen involvement, yet it has been suggested that the effectiveness of such projects may vary across neighborhood types, as a function of social cohesion [11,12]. Evaluations of neighborhood watches, then, should attempt to control for neighborhood type; this is the assumption underlying our analysis.

METHODOLOGY

Initially, the community crime prevention program in Tulsa, known as "Alert Neighbors," and the local police department, were contacted in order to determine the feasibility of the evaluation project. When the interest and

cooperation of both agencies had been established, the geography of the Alert Neighbors project was studied in order to locate two neighborhoods as identical as possible, except that only one of the pair (target) would have been the subject of community crime prevention. The other neighborhood (control) had no formal exposure to Alert Neighbors, though residents would certainly have been exposed to general community efforts to enlist the involvement of neighborhoods. Field observation suggested that the neighborhoods selected were quite similar in their general social and physical characteristics.

The survey instrument, originally developed for use in the United Kingdom, was adapted to the U.S. context with as little change as possible in order to allow subsequent international comparisons. Eighty questionnaires, forty in each study area, were administered to households in May 1982. An effort was made to sample from most or all blocks within both the target and control neighborhoods, but entry into a given block was random. The sample design, then, was stratified by neighborhood and by block. These questionnaires contained eighty questions relating to crime perceptions, victimization experiences, social interaction among neighbors, security practices, demographic, and socioeconomic data. The data from the two study areas were then tested for significant differences using contingency tables. The underlying assumption was that victimization comparisons between the target and control would be most valid if it could be established that the social and physical milieus were, in fact, as similar as field observation had suggested.

CONTEXT OF STUDY AREAS

Were the two study areas sufficiently similar in terms of their general social and physical characteristics to justify the use of a control area? Table 1 shows socioeconomic data derived from the survey. Both areas had a similar proportion of residents who had lived at the same address for more than ten years. Occupational structure was also similar, as were the structures of families. Generally, both areas were composed of either older, retired couples and singles, or young to middle-aged couples with children. Almost all the homes surveyed were owner occupied. However, the age structures of the study areas showed a significant difference. The target area population was older than that of the control area. Despite this, the survey indicated both areas had a similar proportion of those under the age of nineteen. The availability of block data from the 1980 census (not available at the time the survey was conducted) has allowed further comparison between the neighborhoods (Table 2). The age structure indicated in the census showed a similar pattern to that in the survey. There was similar proportion of children under eighteen in both areas, and more aged over sixty-five in the control than target area. However, the census data indicated a difference in the pattern of home ownership found in the study areas. A greater proportion of homes in the control area were

Table 1. Socioeconomic Characteristics of the Study Areas^a

<i>Characteristic</i>	<i>Target</i>		<i>Control</i>		<i>X</i> ²	<i>p</i>	<i>sig</i>
	<i>N</i>	<i>(%)</i>	<i>N</i>	<i>(%)</i>			
Professional occupation	5	29	10	45	3.04	0.08	No
Intermediate occupations	19	71	12	55			
Families with children	17	42	13	33	1.26	0.60	No
Owner occupied homes	40	100	39	98	1.01	0.31	No
Resident at present address over ten years	21	52	20	50	1.60	0.64	No

^aNote to Tables 1, 3, 4, 5: The tables display results abstracted from larger tables, and the chi-squared statistics relate to the original, more comprehensive, tabulations. The original analysis was performed using chi-squared analysis based on frequency counts in contingency tables. The frequencies have also been presented as percentages here for ease of interpretation. Significance statements are based on $p \leq 0.05$ in the original chi-squared tables. $N = 40$ per neighborhood, but N s of any particular survey item may be smaller.

Source: Local survey data, 1982.

owner occupied though levels were high in both areas. The census data also indicated little difference in home values.

Several studies have indicated that the characteristics of buildings, including their design and layout within an area, are related to crime and the fear of crime [2,13,16]. Although some studies have challenged this contention by saying that social structure is a more important determinant of crime and fear [17,18], it was considered prudent to compare the built environments of the study areas, in order to ensure that the areas were indeed comparable in terms of land use patterns and relationships with boundary zones. Field observations indicated that the study areas were predominantly residential in nature.

Table 2. 1980 Census Data for Study Areas^a

<i>Characteristic</i>	<i>Target</i>	<i>Control</i>
Total persons	524	982
Total housing units	223	427
Persons eighteen years and under (%)	18	21
Persons sixty-five years and over (%)	10	30
Owner occupied homes (%)	75	91
Mean home value (\$)	68,427	77,176

^aSurvey-derived median ages were: target thirty-nine years, control forty-nine.

Source: U.S. Census, 1980.

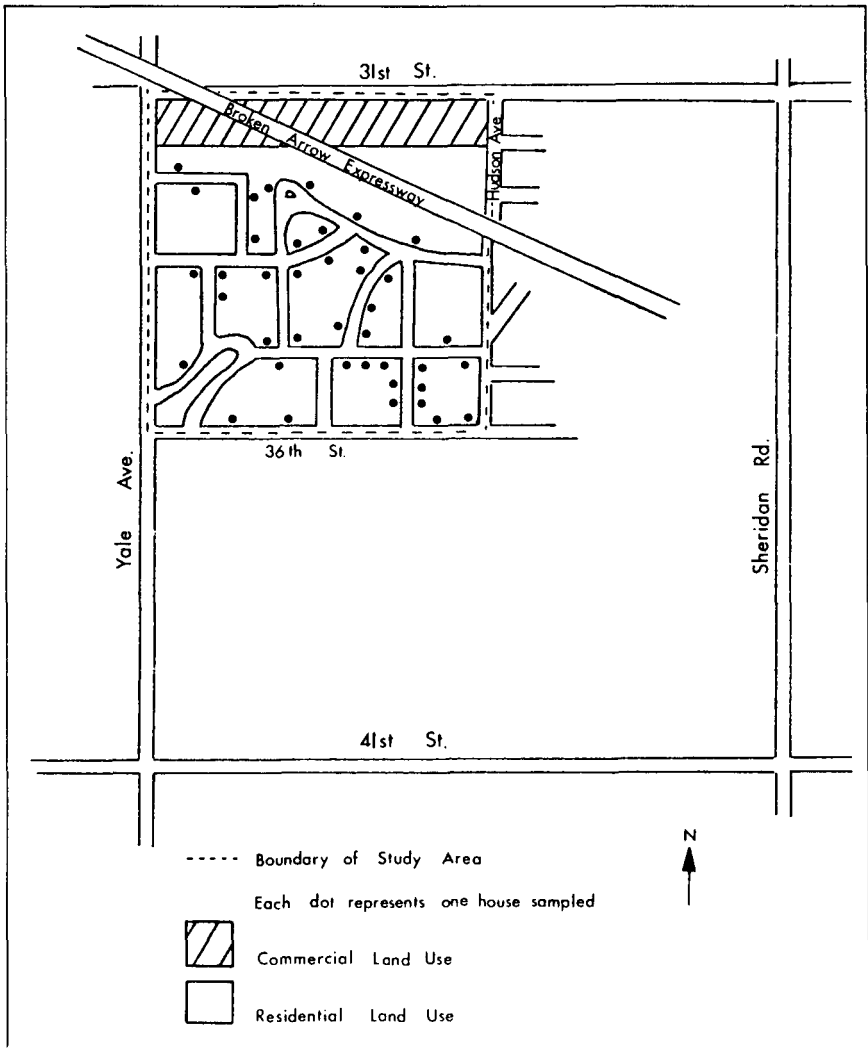


Figure 2. Land uses and locations of houses sampled in the target area.

Almost all the dwellings in both areas were of the single family type, and generally the lot sizes were similar. The interior roads in the study areas were residential access roads with low traffic counts. Furthermore, the layout of the neighborhoods was very similar, with comparable dimensions of front, side, and back yards, including front setbacks. Topographic characteristics were also similar, both areas lacking sharp variations in local relief (see Figure 2 and 3).

The evidence presented above points to the fact that both study areas may be regarded as parts of mature, essentially middle class, suburbs. Despite some differences in socioeconomic characteristics, the neighborhoods are sufficiently similar to warrant the use of a control area to measure the impact of the crime prevention program. It should be noted that the selection of middle class areas meant that it was unlikely that the study would encounter very high rates of

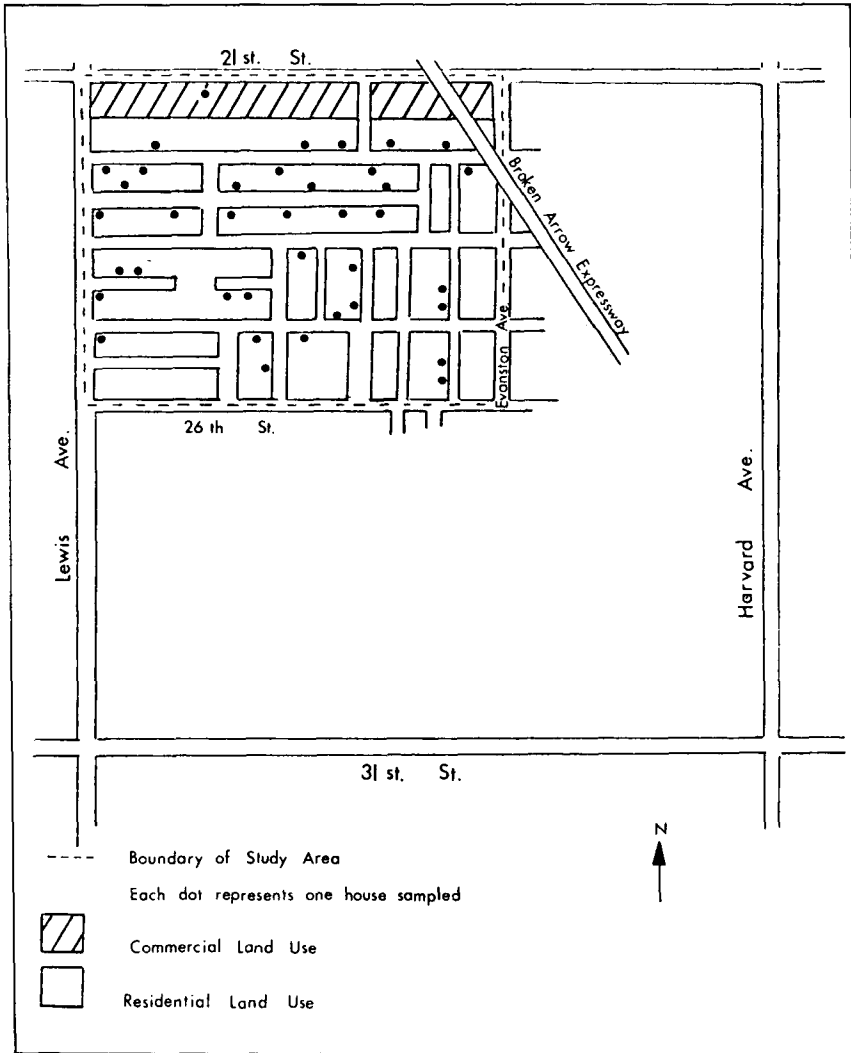


Figure 3. Land uses and locations of houses sampled in the control area.

burglary or other offenses. Further, it may be argued that such middle class neighborhoods, with relatively high levels of education and general civic awareness may be most likely to adopt crime prevention programs while being in least need of them.

OUTLINE OF THE CRIME PREVENTION PROGRAM

The aim of the Alert Neighbors program was primarily to reduce residential burglary. This was to be achieved through small, in-home meetings, and the formation of "block clubs." The meetings were led by a trained volunteer and a police officer, and drew their participants from one block. During the meetings advice was given, and literature distributed, on various burglary prevention practices aimed at increasing home security. Information and statistics on actual crimes and crime rates in the Tulsa area were provided to residents in order to increase general awareness relating to crime risks. Organization around block clubs would supposedly allow residents to get to know each other better. Through such social interaction between groups of neighbors, it was hoped to increase neighborhood cohesion and develop a greater sense of community.

In theory, the residents would then be more concerned with what went on in their neighborhood, keep a better watch on each other's property, and be more willing to report suspicious activities to the police. Greater familiarity between neighbors would also facilitate the recognition of strangers. The program attempted to foster informal social controls that were thought to inhibit burglary. Unlike some crime prevention programs, the low-budget Alert Neighbors program made no attempt to manipulate the built environment in order to prevent crime. Furthermore, control of the program was in local hands, thus allowing avoidance of some of the disadvantages of federal funding mentioned by McPherson and Silloway [8].

RESULTS OF THE ANALYSIS

Given the focus of the Alert Neighbors program on the enhancement of social interaction and on the crime of burglary, the two study areas were compared with respect to the following:

1. Security practices relating to burglary;
2. Social characteristics, including patterns of interaction among neighbors, and levels of satisfaction with the neighborhood as a place to live;
3. Fear and awareness of crime;
4. The level of crime.

The emphasis of the last two was on burglary, consistent with the intent of the program. Overall, there was little difference in security practices relating to

burglary between the study areas. The program advised the installation of dead-bolt door locks, and about three-quarters of the homes surveyed in both areas had such devices. The program stressed that signs of home occupancy were effective as inhibitors of burglary. A simple way to show potential burglars that a house is occupied is to leave a light on at night, and almost all the respondents, in both areas, indicated that they did so if they were absent.

As the program tried to encourage cooperation between neighbors, the participants were advised to inform their neighbors when they were to be away for more than a few days, and leave a key with them. In this way, neighbors could keep a watch on the unoccupied home, and collect deliveries of mail and newspapers. There was no significant difference in the proportion of respondents in both study areas who informed neighbors, and left a key with them, when away for a few days or more (Table 3). However, it was suggestive that the target area always differed from the control in a positive direction.

Participants were advised to continue deliveries of mail or newspapers when away for more than a few days. The rationale for this was that as few people as possible should know that the house was unoccupied; a neighbor should collect these deliveries. However, Table 3 indicates that this advice had little impact. Similar proportions of respondents in both areas declined to stop deliveries of mail and newspapers.

The results of the survey indicated that the Alert Neighbors program had little apparent effect on the social interaction characteristics of the target area. There was no significant difference between the areas in terms of respondents who reported having friends in the neighborhood (Table 4). The program also seems to have had little impact on social interaction between neighbors, with some 40 percent of the respondents in each area perceiving that their neighbors kept to themselves. Also, similar proportions of respondents reported that neighborhood friends were seen on a daily basis (Table 4). Of the eighty persons interviewed, all but one found their neighborhood attractive, and were satisfied with it as a place to live. This suggests that the program had little detectable effect on levels of neighborhood satisfaction.

Table 3. Security Practices

<i>Security practice</i>	<i>Target</i>		<i>Control</i>		X^2	<i>p</i>	<i>sig</i>
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>			
Inform neighbors when away for a few days or more	33	83	30	75	0.90	0.64	No
Leave a key with neighbors	29	72	18	45	3.48	0.07	No
Stop deliveries of mail	14	35	8	20	2.26	0.13	No
Stop deliveries of newspapers.	21	52	18	45	0.45	0.50	No

Source: Local survey data, 1982.

Table 4. Social Interaction Characteristics

<i>Security practice</i>	<i>Target</i>		<i>Control</i>		X^2	<i>p</i>	<i>sig</i>
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>			
Have friends in neighborhood	26	35	22	45	2.26	0.27	No
Perceive that neighbors keep to themselves	16	40	16	40	0.00	1.0	No
Perceive that neighbors make frequent visits to keep in contact	24	60	24	60			
Satisfied with neighborhood as a place to live	35	88	32	80	2.63	0.43	No
Neighborhood friends seen on a daily basis	14	53	10	47	0.28	0.60	No

Source: Local survey data, 1982.

The degree of fear of criminal victimization occurred at about the same level in both areas (Table 5). There was also no significant difference between the areas in terms of the proportion of residents who thought that burglary was a common occurrence in their area. The initial impression, therefore, is that the program had little effect on fear, or on perceptions of the incidence of burglary among residents in the target area. However, it may be argued that this lack of impact can be considered a positive effect, in the sense that heightened consciousness of crime-related issues could be expected to contribute to fear of crime, a phenomenon observed elsewhere [10]. Despite there being no difference between the areas in how respondents viewed the current incidence of burglary, a significantly larger proportion of respondents in the target area

Table 5. Perceptions of Crime

<i>Perception</i>	<i>Target</i>		<i>Control</i>		X^2	<i>p</i>	<i>sig</i>
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>			
Worry about criminal victimization	22	55	23	58	0.13	0.72	No
Think incidence of burglary greater at present than in 1977	33	82	17	42	15.45	0.0004	Yes
Think current incidence of burglary is high in area	7	18	11	27	1.98	0.37	No

Source: Local survey data, 1982.

Table 6. Frequencies of Selected Incidents^a

<i>Type of incident</i>	<i>Target</i>	<i>Control</i>
Vehicle stolen	0 (2)	2 (0)
Parts stolen from vehicle	1	3
Vehicle vandalized	1 (1)	2 (5)
Bicycle stolen	2	1
Home burglarized	5 (1)	3 (1)
Home broken into, nothing taken	0	1
Attempted break-in	4	3
Belongings taken from outside home	6	8
Belongings outside home vandalized	6 (5)	6 (2)
Total, all incidents	34	37

^a Frequencies in parentheses refer to incidents occurring between January 1, 1976 and December 31, 1980. Other values refer to incidents between January 1, 1981 and May 1, 1982.

Source: Local survey data, 1982.

thought that burglary was more common in their area now, as compared to 1977. This indicates that the program may have been successful in informing people of an increase in burglary over a period of time. An alternative interpretation is that Alert Neighbors actually indoctrinated people with information of dubious validity.

Table 6 shows victimization data for several categories of property crimes, and, for some of these crimes, changes in their incidence. The total number of selected crimes revealed by the survey was very similar, though rates (using either total population or total housing units as denominators) differed. In the target area, there were 0.06 incidents per capita, 0.15 per housing unit. Comparable values for the control were 0.04 and 0.09. Rates calculated for the period since Alert Neighbors began in 1981 were related similarly, since reports of victimization frequencies were weighted heavily in favor of the more recent period (Table 6). Given the rather low frequencies of incidents among the sampled households, and the various sources of error in victimization surveys of this type, the observed differences in frequencies and rates between the study areas are probably moot. The evidence would not persuasively support the position either that the Alert Neighbors program had been effective in reducing crime, or that it had not been. It could be said that such effects as may have existed were apparently quite weak. In spite of its substantially smaller total population and number of households, the target area sample actually reported more burglaries during the operation of Alert Neighbors compared to the control. However, the Ns are so small that the difference may

almost be discounted. Alert Neighbors has functioned in a neighborhood where it really may not be needed and its actual effects are not easily measured.

CONCLUSION

Results of the survey indicated that the Alert Neighbors program had little impact on the security practices in the target area. Most of the practices mentioned in the program were relatively simple, common-sense actions that most residents would probably employ anyway. Almost all the people sampled were home owners, who had considerable motivation to adopt sound security practices. Advising residents to use such practices is probably redundant, as they are likely to be in use already, at least in the socioeconomic environment examined here.

The social interaction and neighboring characteristics of the two areas were very similar, probably indicating that the program had little effect on these attributes. It is somewhat unrealistic to expect that monthly meetings organized around one issue, crime, will have a significant impact on complex phenomena like social interaction between neighbors, neighborhood friendship patterns, and attitudes towards the neighborhood as a whole.

Some studies have found that some crime prevention programs have inadvertently increased the fear of crime as a result of vicarious victimization [e.g., 10]. However, it would seem that Alert Neighbors had little impact on fear in the target neighborhood. Although the program may have succeeded in informing people that burglary had increased since 1977, there was little impact on the proportion of residents who thought that burglary was a common occurrence in their area. A possible explanation for the lack of impact on fear and perceptions of current levels of burglary, was that the negative effect of informing people that they could become a victim of crime was offset by increased awareness of participation in a program aimed at reducing chances of victimization. However, in the program studied by Norton and Courlander there was a positive relationship between increased security consciousness and increased fear. The Alert Neighbors program had little effect on security consciousness, and one explanation for the lack of impact on fear could have been general apathy towards the program. Furthermore, low levels of victimization experience and of actual neighborhood crime rates did not give the program as much impact and urgency as it might have had in a different type of area.

The main aim of the Alert Neighbors program was to reduce residential burglary. This was to be achieved by increasing security practices in conjunction with increasing the awareness of burglary, and increasing social interaction between groups of neighbors. Given that the program had little effect on the first two characteristics, and a questionable effect on the third, it

was not surprising to find that the program also appeared to have little impact on the incidence of property crimes in the target area.

It should be pointed out that the apparent lack of effectiveness of this program in this particular context is not necessarily an indictment of all such efforts. Further evaluations of this type, systematically conducted in different social spaces, have the potential of determining where community crime control is most productive. The broader issue of general social costs and benefits of such programs, however, is still moot. There is a distinct risk, for example, that an apparently effective community crime control program may have significant displacement effects [19]. It is possible, if not likely, that short-term benefits for a specific neighborhood are reaped at the expense of surrounding areas. The net supply of victimization across an urbanized area may not be affected. Even if this suggestion could be validated, short-term political pressures at the local level are probably so strong as to ensure the continuation of neighborhood-based crime control efforts.

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Direct reprint requests to:

Dr. Keith Harries
Department of Geography
University of Maryland Baltimore County
Catonsville, MD 21228