THE CONDITIONING EFFECTS OF NEIGHBORHOOD ECOLOGY ON BURGLARY VICTIMIZATION

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The systemic theory of social disorganization maintains that opportunities for victimization are conditioned by neighborhood social order. Systemic social control emanates from the strengths of a neighborhood's private, public, and parochial social orders. Using neighborhood-level data from eight Chicago neighborhoods, this study tested a theoretically derived hypothesis that burglary victimization would vary across neighborhoods with different social orders. Neighborhoods were classified into three groups according to ecological measures of social orders and then analyzed for different levels of residential burglary risk. The results mainly supported the framework, although certain findings suggested some refinements to the model were in order. These and other implications are discussed.

Keywords: neighborhood ecology; victimization; burglary; systemic social disorganization

Social disorganization theory has been the subject of renewed attention as an explanation for both criminal behavior and the distribution of victimization opportunities. Although several scholars have

contributed to updating the social disorganization framework (e.g., Sampson, 1991; Sampson & Groves, 1989; Smith, 1989), Bursik and Grasmick (1993) presented the most complete model to date. Their victimization model integrated a revised version of social disorganization theory with routine activity theory to form a theoretical framework that explains the distribution of victimization opportunities at the neighborhood level.

Although commonly associated with aggregate rates of offending in neighborhoods, the systemic disorganization model addressed victimization patterns as well (see Bursik & Grasmick, 1993). The model posited a link between neighborhood social order and the character of the sustenance routines that constitute the patterns of people's daily lives. Work, leisure, community group meetings, shopping, and social activities are examples of typical sustenance activities that characterize people's lives. According to the systemic model, systemic control emerges from social order characteristics that are manifest in everyday life. Various strengths of social order result in different levels of control, which in turn affect the risk of victimization. Bursik and Grasmick's (1993) updated model transformed social disorganization theory into an ecological model of community social order and conceptually integrates it with routine activity theory, thereby linking people's routine activities with neighborhood social order to explain victimization opportunities.

This research tested a structural variance hypothesis derived from Bursik and Grasmick's (1993) systemic victimization model that posits an inverse relationship between the strength of neighborhood ecological social order and residential burglary victimization. The null hypothesis tested in this study can be stated as no difference in burglary risk across neighborhoods with varying strengths of social order.

BURSIK AND GRASMICK'S (1993) SYSTEMIC MODEL OF VICTIMIZATION

The systemic model integrates routine activity theory and systemic social disorganization to address neighborhood victimization. Routine activity theory provides a framework for modeling routine activities (e.g., work, school, leisure, crime) that characterize a neighborhood, whereas systemic social disorganization focuses on ecological dimensions of social order. The network of these routines gives a

dynamic quality to the model's consideration of victimization opportunities because residents' activities and household characteristics are conditioned by neighborhood social order (Bursik & Grasmick, 1993).

Systemic social disorganization influences systemic control at the neighborhood level through its effects on the private (primary relationships among family), parochial (informal networks of friends and acquaintances), and public (neighborhood links with public agencies) dimensions of social order. The first two aspects of social order are characterized by interpersonal networks that emerge among residents as they interact in their daily lives; the third refers to the degree of integration between neighborhoods and service agencies in the larger community (Hunter, 1985). The patterns of residents' sustenance activities (including, among others, work, leisure, social activity, and recreation) are the daily interactions of inhabitants and represent the embodiment of an ecological structure that either constrains or enables criminal opportunities. The characteristics of these activities influence the quality of neighborhood control mechanisms, and it is the quality of guardianship that affects the relative exposure of potential targets (Cohen, 1981). This results in a model that represents the distribution of victimization risk as a function of the conditioning effects exerted by neighborhood social order.

EMPIRICAL EVIDENCE FOR THE SYSTEMIC MODEL OF VICTIMIZATION

Recent studies indicate the explanatory promise of this model. In a test of a multilevel social disorganization model, Yang and Hoffmann (1994) found that community- and individual-level variables had significant direct and indirect effects on self-reported delinquency in Taipei neighborhoods. The authors focused on a control model and found that heterogeneity, income, neighborhood mobility, density, family disruption, involvement in conventional activities, and association with deviant peers all exerted significant effects on delinquency. Involvement was positively related to heterogeneity, community mobility, family income, and family disruption. Also, bonds to deviant peers were influenced by heterogeneity, population density, family income, family mobility, and family disruption.

Although supportive of a multilevel approach, these findings were constrained by data limitations (e.g., no community-level measures of family disruption, a heterogeneity measure based on aggregated individual perceptions of racial composition) and a reliance on large, census-based neighborhood aggregations. Moreover, the generalizability of these results may be limited because Taipei is a society with more inherent social control than is present in the United States. Nevertheless, evidence of direct and indirect relationships point to the operation of complex macro- and micro-level linkages in a social disorganization framework.

In their test of the systemic model, Rountree, Land, and Miethe (1994) found that contextual neighborhood factors had direct effects on victimization and also conditioned the effects of individual routines and safety precautions on victimization risk. Individual-level factors that affect opportunities for crime do not operate at that level alone but are influenced by the surrounding context.

Using census data from Seattle neighborhoods, Rountree and her colleagues (1994) estimated contextual models for the risk of burglary and violent crime (i.e., assaults by strangers and thefts by force). They found that the risk of violent victimization was increased by individual exposure to dangerous activities outside the home. There was support for the opportunity model in the case of burglary risk. Higher levels of attractiveness (e.g., income and presence of expensive goods) increased the likelihood of burglary, whereas increased levels of guardianship (i.e., home occupancy) lowered the risk. Proximity to offenders (as measured by the presence of incivilities) also increased the risk of burglary.

Furthermore, macro-level factors also had significant effects on victimization risks. The risk of burglary was increased by the presence of both incivilities and ethnic heterogeneity (i.e., measures of disorganization). However, the positive main effect of heterogeneity was reduced by its negative interaction with incivilities. According to Rountree et al. (1994), this finding suggested that

> in [a] more disordered neighborhood, with higher degrees of incivilities, the positive effect of increased ethnic heterogeneity on burglary

risk is tempered, or, alternatively, in ethnically heterogeneous neighborhoods, the positive effect of incivilities on burglary risk is reduced. (p. 410)

The theoretical importance of routine activity patterns within particular ecological settings was reinforced by a study that focused on the relationship between student activity patterns and reported burglaries at an apartment complex. Robinson, Faust, and Elliott (1994) found that burglary rates were surprisingly low at a student complex despite the presence of many environmental risk factors such as transient populations, high levels of unoccupied apartments, attractive targets, and proximity to potential offenders. They concluded that the sporadic nature of activity and the unpredictable pattern of occupancy associated with student life accounted for the low burglary rate. A wide assortment of class and work schedules apparently combined with active social lives to counter the effects of factors often associated with burglary risk. The integration of different sustenance patterns contributed to the level of systemic control in the apartment complex. In a very real sense, control emerged from the unpredictability of student routines.

The key role of behavioral routines in establishing systemic control at the neighborhood level is reinforced further by results showing the importance of street blocks as a context for residents' interactions and the social control that emerges from these networks. Street blocks are micro-ecological behavior settings for neighbors and represent the spatial dimension of neighborhood systemic control (Taylor, 1997).

All of these studies support the systemic model and in different ways point toward the salience of neighborhood social order. Rountree et al. (1994) documented the effects of structural variation, although they were able to link this variation to routine activities in only a limited way. Robinson and his colleagues (1994) found intriguing evidence of how a specific network of routine activities protects against victimization but did not analyze these effects across different structural settings. Taylor (1997) illustrated the prominence of street blocks as environments for neighborhood interactions by focusing on within-neighborhood variation.

METHOD

DATA

Data from the Chicago Neighborhood Study (Taub, Taylor, & Dunham, 1984) were used in this analysis. The original researchers selected eight neighborhoods according to varying crime rates, different racial compositions, and various types of housing markets and conditions. In addition, victimization data were available for each neighborhood.

Conducted in 1979, the survey sample was chosen by the National Opinion Research Center's random-digit dialing program. The survey included eight Chicago neighborhoods with a total sample size of 3,310 residents. The individual neighborhood samples ranged from 395 to 441, with an average of 414 people. The sample's characteristics and a discussion of the methods used are well documented (see Taub et al., 1984). The neighborhoods varied according to their social order characteristics, thereby permitting this analysis to focus on the conditioning effects of different ecological structures. Although the data were collected more than two decades ago, the data are still appropriate for testing this theory because the sample characteristics and variables gave the study strong internal validity.

For this analysis, the neighborhoods were grouped in the same manner as that used by the original researchers. Taub and his colleagues (1984) chose these neighborhoods to maximize interneighborhood variation. The neighborhoods of Beverly, Hyde Park-Kenwood, and Lincoln Park constitute Group 1. These are neighborhoods that are well integrated racially, somewhat diverse with respect to social class, and relatively affluent. These three neighborhoods did not experience physical or economic decline as a result of changing population, and their infrastructures are sound. The second group included East Side and Portage Park. They are populated mostly by White, working-class households, are the most racially homogeneous of the neighborhoods, and have a history of community activism, mostly opposing racial integration. These neighborhoods experienced moderate economic and physical deterioration as racial integration proceeded. The third group contained the neighborhoods of Back of the Yards, Austin, and South Shore. All these areas experienced physical and economic dete-

rioration as the population changed and as minorities became concentrated and more disorganized over time.

The neighborhoods varied in their structure and character and exhibited different social orders. Their different economies, class structures, histories of activism, and growth patterns suggested that different types of social orders emerged as the neighborhoods grew. This was confirmed by the preliminary analysis completed by Taub and his colleagues (1984). They documented differences among the neighborhood groups with regard to, among other things, the ratio of households with two adult heads to the total number of households (i.e., private social order); the ability to get help from local, interpersonal networks (i.e., parochial order); and the prevalence of problems related to drugs and garbage pickup (i.e., public order). These two problems were neighborhood conditions that could not be addressed at the neighborhood level and that required assistance from agencies outside of the neighborhood and therefore provided a reasonable measure of public order.

This data set was well suited for this analysis for two reasons. One was the presence of social order indicators, which thereby permitted a test of the structural variance hypothesis tested in this study. The second reason was that the neighborhoods were defined naturally without relying on census tracts or other bureaucratic measures. Neighborhoods as geographic areas obtain meanings in people's lives because of the residents who identified with living in particular areas (i.e., subjective identification) and because of historical continuity (Warren, 1978). These were relevant characteristics when testing the systemic model because the theory relies on human networks and social order characteristics that derive their salience from those who populate the areas. The neighborhoods in this analysis fit these criteria very well (see Taub et al., 1984).

DEPENDENT VARIABLE

Household burglary victimization was the outcome of interest. This was a crime in which the household was clearly the target, providing a direct link between neighborhood social order and victimization. Other crimes (such as robbery) may occur away from home, blurring the connection between victimization and neighborhood ecology and

TABLE 1:   Composite Ecological Rank of Neighborhood Social Orders

Neighborhood Group	Neighborhood Name	Relative Ranking
Group 1	Beverly	1
	Hyde Park–Kenwood	2
Group 2	East Side	1
	Portage Park	1
Group 3	Back of the Yards	1
	Austin	2
	South Shore	3

NOTE: The ecological ranking of neighborhoods was used to group them according to the relative strength of their private, parochial, and public social orders. Individual indices for each of the social orders were computed and then added. The index of private order strength was a measure of two-person heads of households used by the original researchers, the parochial order index was a scale of institutional activity (alpha = .75), and the public order index was a scale of neighborhood problems (alpha = .80). The relative ranking refers to how each of the neighborhoods ranked in relation to the others in the same group.

introducing error into the analysis. Also, the victimization data contained in the data set came from the head of household. Another source of error arises from the fact that information about personal victimization involving other members of the household comes from the head of the household rather than directly from the victim. A focus on the household crime of burglary avoids these sources of error and permits a clear test of the hypothesis.

INDEPENDENT VARIABLES

Several variables measuring both household composition and household-level routines were used to estimate the effects of neighborhood social orders on burglary victimization. Measures of household composition include the presence of children younger than 19, the presence of a single or two-person head; family income; household size; the age, sex, and race of the household's head; and the length of residence. Household-level sustenance routines were measured by four variables, two of which are indices of household activities. Two measures included the average weekly hours worked by the head(s) of the household and the frequency of visiting outside the neighborhood. The two index measures are as follows:

1. An index that measures the frequency with which household members use stores and institutions in the neighborhood for their sustenance needs. These sustenance needs include shopping for clothes, banking, attending church, getting medical care, and shopping for food (alpha = .64).
2. A second index measured the strength of a household's link to the neighborhood's parochial order. The three variables combined for this index were measures of the respondent's certainty of obtaining help from a neighbor if sick, borrowing money ($25) in an emergency, and getting someone to watch the property while away for an extended time (alpha = .75).

ANALYSES

Employing logistic regression, the analyses were based on the idea that the likelihood of household burglary victimization was a function of household composition and the sustenance routines of people in the home conditioned by social order characteristics. This was represented as:

$$\text{LOGIT}(Y) = \delta + B_1 X_1 + B_2 X_2 + BnXn$$

where the dependent variable measures burglary victimization as a dichotomous variable (1 = yes, 0 = no), δ represents the intercept, X_1 and X_2 represent household characteristics and sustenance routines, respectively, and B_1 and B_2 signify the coefficients associated with each independent variable. This equation represents the general household-level victimization model that was estimated across neighborhoods with different social order traits.

In this study, individual neighborhoods were grouped according to their similarities in social structure and social order. The groups varied according to the strength of their social orders. The model can be thought of as vectors of covariates for each of the groups. In this case, the null hypothesis was represented as

$$\text{H}_0: X_{a1} = X_{b1} = X_{c1}$$

where a, b, and c denote neighborhood groups and the subscript 1 refers to a vector of independent variables.

This test of the systemic model involved a sequence of steps. The baseline model for analysis was a full sample (all eight neighborhoods), with two dummy variables controlling for the mean effects of neighborhood groups. The second step tested for significant differences between the full sample model and each of the three neighborhood group models. The log likelihood ratios for the group models were added together, and the total was subtracted from the log likelihood ratio for the full sample. The difference between the full sample and the group models, given the differences in degrees of freedom, yielded a chi-square statistic that measured the variance in effects of the covariates generated by the full and group models. A significant chi-square ($p < .05$) rejects the null because it indicates differences in victimization risk across different ecological contexts, hence a need for separate models.

Where variance exists in effects among structural contexts, the final phase in the analysis concentrated on understanding these differences. The systemic framework maintains that the effects of household routines will vary under different structural contexts. Therefore, rejecting the null hypothesis supports the framework.

There were two steps to this final phase of the analysis. The first was to test each of the covariates for significance by forming interaction terms between each of the independent variables and the dummy variables in the equations. There were 12 such covariates in the models that measured household composition and the character of household routines. Significant terms ($p < .05$) were retained, and those that did not reach significance were removed from the equation. The second step was to estimate a model with the significant interaction terms entered simultaneously. Those terms remaining significant represent the sources for the variance among the different structural settings and provide the basis for understanding the ways in which the covariates affect burglary victimization across neighborhoods with different strengths of social order.

RESULTS

The results of the initial test for invariant effects of household characteristics on burglary victimization are displayed in Table 2. The dif-

TABLE 2:   Invariance Test for the Full Sample Model

Model	Log Likelihood Ratio	df
Full sample	1,824.11	15
Neighborhood Group 1	671.90	15
Neighborhood Group 2	329.80	14
Neighborhood Group 3	754.48	15
Summed model	1,756.18	44
Difference*	67.93	29

*$p < .05$.

ference between the full sample model and the summed group models yielded a chi-square of 67.93 with 29 degrees of freedom. This was statistically significant, indicating that significant variance existed among the neighborhood groups because of the conditioning effects exerted by the different social order characteristics on burglary risk.

The burglary model estimated for the full sample, which served as the baseline model for the specification of which covariates accounted for the significant between-group variance, suggested that several household variables contributed to burglary victimization (see Table 3). Both age and race of the household head showed a significant negative relationship, indicating that younger households and those headed by African Americans had a higher risk of victimization. Length of residence also was significantly related but in a direction that revealed more stable households were at a higher risk of burglary than were those occupied by newer residents in the neighborhood. Linkage to the parochial order was negatively related to burglary victimization, indicating that households with stronger links to their neighborhood's parochial order had a reduced risk of burglary.

The emphasis here is not on this pattern of effects. Rather, the brief discussion of the full sample model sets the stage for use as a baseline model for analysis of the covariates that account for the between–neighborhood groups variance. The main point of interest was to understand the variant effects of the household covariates among neighborhoods with different social order characteristics. A series of estimations using each of the variables as interaction terms with the two neighborhood group dummy variables yielded four significant interaction terms: household size, sex of the household head, fre-

TABLE 3:   Baseline Model for the Full Sample

Variable	B	SE	Significance
Children younger than 19	− .1131	.1758	.2600
Household head	−.0439	.1417	.3784
Family income	−.0422	.0326	.0974
Household size	.1680	.1092	.0620
Household head age	−.2054	.0688	.0014*
Length of residence	.1103	.0661	.0480*
Household head race	−.2401	.1247	.0271*
Household head sex	−.1828	.1411	.1024
Visit out of area	−.0056	.1427	.4845
Parochial order link	−.2554	.0641	.0001*
Sustenance activity	−.0072	.0644	.4556
Household head work	.0581	.0788	.2305
Dummy (Group 1)	.0466	.1540	.3811
Dummy (Group 2)	−.2981	.2003	.0684
Constant	−.7733	.6326	.1108

Total number of cases = 3310 (unweighted)
Number of selected cases = 3310
Number of unselected cases = 0
Missing data = 377
Number of cases included in
  analysis = 2933
−2 log likelihood = 1824.11
Goodness of fit = 2943.54

	Chi-Square	df	Significance
Model chi-square	54.991	15	.0000
Improvement	54.991	15	.0000

*$p < .05$.

quency of visiting outside the neighborhood, and linkage to the parochial order (see Table 4).

When these four terms were entered simultaneously into the pooled model, all retained their significance (see Table 5). These four variables thus contributed to the variance among the neighborhood groups, and examining these variables' contributions showed how these household characteristics combine with neighborhood social order to influence opportunity for burglary victimization.

Two of the sources of variance were household characteristics that were not direct measures of routines. However, past research and the

TABLE 4:   Baseline Model for Full Sample With Significant Interaction Terms

Variable	B	SE	Significance
Children younger than 19	−.1350	.1785	.2248
Household head	−.0545	.1419	.3504
Family income	−.0362	.0328	.1351
Household size	.3075	.1257	.0072
Household head age	−.1914	.0692	.0028
Length of residence	.1227	.0666	.0326
Household head race	−.2525	.1258	.0224
Household head sex	.1280	.1942	.2550
Visit out of area	−.2862	.1828	.0587
Parochial order	−.1440	.0697	.0195
Sustenance activity	.0010	.0652	.4938
Household head work	.0220	.0797	.3913
Dummy (Group 1)	.9598	.6447	.0683
Dummy (Group 2)	1.7319	.5600	.0010
Household Size × Group 1	−.3878	.1786	.0150
Household Head Sex × Group 1	−.7231	.2765	.0045
Visit Out of Area × Group 1	.7084	.2834	.0062
Parochial Order × Group 2	−.6211	.1637	.0001
Constant	−1.5406	.7015	.0141

Total number of cases = 3310 (unweighted)
Number of selected cases = 3310
Number of unselected cases = 0
Missing data = 377
Number of cases included in analysis = 2933
−2 log likelihood = 1794.288
Goodness of fit = 2965.749

	Chi-Square	df	Significance
Model chi-square	84.812	19	.0000
Improvement	84.812	19	.0000

patterns of results in this study permit reasonable inferences about household sustenance routines. The other two were direct measures of household routines and provided insights into their effects on burglary victimization within different structural contexts.

Household size was positively related to burglary in all three groups, but it reached significance only in Group 3. This appears to be the result of larger families in this group. The population of these neighborhoods was composed of more young people than in the other

TABLE 5:   Neighborhood Group Models (logit coefficients)

Variable	Group 1	Group 2	Group 3
Household size	.079	.410	.405*
Household head sex	−.728*	.339	.131
Visit out of area	.348	−.182	−.328
Parochial order	.068	−.790*	−.228

*p < .05 in the neighborhood group model.

neighborhoods, and this was the population that was most likely to be responsible for committing these crimes. Proximity to this group of potential offenders apparently increased the likelihood of burglary (Sampson & Lauritsen, 1990).

The sex of the household head also accounted for different effects in the various neighborhood groups. It had a significant negative relationship with burglary in Group 1, indicating that households headed by women were less likely to be victimized than homes that were headed by men.

The frequency with which residents visited with friends or relatives outside their neighborhood also had varying effects depending on the neighborhood context, although this behavioral dynamic failed to reach significance in any of the group models. Consistent with the systemic model, frequent visits outside the neighborhood increased the likelihood of burglary victimization for households in Group 1. However, there was an inverse relationship between this variable and victimization in the other two groups. The different directions of the relationship with burglary illustrate that the different effects of this variable were conditioned by the neighborhood structural environment.

The last variable that contributed to the between-group variance was linkage to the neighborhood parochial order. Here too, depending on neighborhood context, there was a reversal in the direction of its relationship to victimization. It was intriguing that the negative relationship predicted by the theory only occured in the two groups of neighbor- hoods that had the weakest public and private social orders. Furthermore, this variable reached significance in Group 2 but did not have a significant effect in Group 3, although the relationship was in the expected direction.

DISCUSSION

Larger households seemed to have an increased risk of burglary, but it was a statistically significant factor only in Group 3 (the weakest social orders). Although the direction of this variable's relationship to burglary was positive in all the neighborhood groups, the fact that it reached significance only in this group suggests that size of household interacted differently with the social order traits of these neighborhoods compared with the other two groups. This group of neighborhoods had the largest population of young people and the weakest public and parochial social orders. The presence of young people was consistent with increased victimization, as this was the high-offending age group responsible for many crimes including residential burglary.

This point was central to the viability of the systemic model of victimization. The presence of relatively weak parochial and public orders suggested that the common sources of systemic control are weakened in these neighborhoods, even while controlling for other factors. Moreover, the weaker public order indicated that these neighborhoods were not as well integrated vertically with the surrounding community and do not receive the social control and guardianship benefits that might otherwise emanate from this dimension of community. In addition, the weak parochial order that characterized the areas translates into a low level of informal control.

Although post hoc, it was possible to speculate on one source of the explanation for the reduced social control effects of weak public orders. Patterns of police activity represent one of the factors that entered into offenders' decisions about neighborhood choice and target vulnerability (Rengert & Wasilchick, 1985). Specific measures of police activity along with other public order activity (i.e., commercial and real estate investment, public works) were necessary to pinpoint the exact ways low levels of neighborhood integration with the surrounding community translated into increased victimization risk. This represented an avenue for future research.

The neighborhoods in Group 3 were the most disorganized of the groups, had the weakest public and parochial orders, and had the most children younger than 19 years of age compared with the other groups. It was consistent with the theoretical framework that these neighbor-

hoods would have the highest rate of burglary victimization. There was relatively less systemic control in these neighborhoods to counteract the criminal behavior of its youth population, which was in a high-offending age group. Moreover, offenders motivated toward burglary would be expected to target the houses in the neighborhood they knew the best (Wright & Decker, 1994). It makes sense that these would be houses with other young people because these are the places where potential offenders would spend time with their peers and become familiar with the behavior patterns of the homes' occupants as well as with the designs and contents of the houses.

The gender of household heads also interacted with neighborhood structure, and differences in its effects across neighborhood groups were more dramatic than with household size. Sex was significant only in Group 1, and the negative coefficient indicates that female household heads had a reduced risk of burglary. This relationship existed in the neighborhood group with the strongest social orders and the least amount of social disorganization. In contrast, the direction of the relationship between head of household sex and burglary victimization reversed in the other two groups. The theoretically meaningful point was the reversal of direction in the relationship between gender and burglary depending on neighborhood context. Households with female heads had an increased risk in poorer, more disorganized areas, whereas there was a reduced risk in wealthier, less disorganized neighborhoods. This was consistent with the systemic model because of its emphasis on systemic control. There was nothing inherently risky about women heading households; rather, an increased risk emerges from household characteristics within different structural settings. Households headed by single adults (often women in poor areas) resulted in a reduced level of informal social control at the neighborhood level (Bellair, 2000), and this interacted with an increased vulnerability of homes with single heads (Sampson, 1995).

In addition, this finding seemed to be the result of the greater prevalence of two-person households in Group 1 neighborhoods than in the other two groups. This is discussed in more detail in a later section. Given the older population in this group (especially in Beverly), it is possible that these households are more likely to include older women who do not work outside the home and therefore their increased presence at home provides some degree of control. This interpretation was

reinforced by the fact that the relationship of sex to victimization reversed direction in the other two groups. Although not significant in these groups, the relationship of sex of head of household to burglary victimization is consistent with the greater prevalence of households headed by single women in these two groups.

Whereas we must infer differences in household routines from household size and sex of household head, the frequency with which household members visited outside their neighborhoods is a direct measure of behavioral routines. This was the third variable that contributed to the between-group variance, and again the direction of the relationship reversed between neighborhood settings. This covariate was not related significantly in any of the group models, but there were significant differences among the groups. It was related positively in Group 1, whereas it was negatively related in the other two groups that had weaker social orders and more disorganization.

This was a puzzling result and was contrary to what the systemic model would predict. It makes sense that increased frequency of visiting outside the neighborhood would decrease household guardianship and increase burglary risk, but this occurred only in Group 1. It was possible that the lack of significance in this group points to the effects of a relatively strong social order. However, the weaker levels of systemic control in the other two groups would lead to the expectation that the effects of frequent visits away from the neighborhoods would increase the risk of burglary. However, this did not occur. In fact, the opposite occurred, as this variable was inversely related to burglary in Groups 2 and 3.

One potential explanation for this unexpected finding was that visiting outside the neighborhood is more common in Group 1 than in the other two groups. There was a significant difference among the neighborhood groups in this regard, especially between Groups 1 and 3. Where it occurred more often, visiting outside the neighborhood had a greater probability of being a risk factor. In other words, there was a greater chance that the actions of residents would coincide with those of motivated offenders, thereby increasing the risk of burglary. In the poorer neighborhoods, there may have been less visiting of this type, perhaps because residents' lives are more constrained to the areas where they reside. Related research on the relationship between social

class and social activity supports the plausibility of the interpretation (Greenberg & Rohe, 1986).

Household ties to the neighborhood parochial order were the second direct measure of household dynamics that contributed to the different effects among the neighborhood groups. In this case, the direction of its relationship to burglary also reversed between Group 1 and the other groups. It had a nonsignificant positive relationship in Group 1 but a significant negative relationship in the working-class group (Group 2), indicating that those households with stronger links were at a lower risk of being victimized by burglary than were households with weaker links. It also was negatively related in Group 3, but it did not reach significance.

Although the parochial orders were weaker in Groups 2 and 3, household links to the parochial order exerted control on burglary risk, whereas this did not occur in Group 1, which had a stronger social order. There was a significant protective benefit from close links to the parochial order in Group 2, which was related to burglary victimization in the same direction, although nonsignificantly in Group 3. It is interesting that this parochial linkage was related positively but weakly and not significantly to burglary in Group 1. Although Group 1 had the strongest social orders of the three groups, the systemic control that close links to the parochial order conveyed in Groups 2 and 3 were not found.

Two general conclusions can be drawn regarding the relationships between household routines and burglary victimization. The first concerns the primacy of routines over population demographics in determining burglary risk. This was discussed earlier with respect to the sex of household heads, but other evidence reinforces this point. For example, income has typically shown a positive relationship to burglary victimization (e.g., Cohen & Felson, 1979). The usual interpretation has been that high-income households (in a relative and absolute sense) are more attractive targets because these households are a better source of valuable items to steal. Recent research (Rountree et al., 1994), however, found that the presence of valuable consumer items in households did not contribute to property victimization. In this research, income did not contribute to the variance among the groups, although the neighborhoods differed significantly in this regard. This finding suggests that it was the interaction between social

order and household routines rather than wealth that contributed to household victimization. The assumed attractiveness of the target to a motivated offender may not matter so much; rather, it is whether the level of systemic control is adequate.

The second conclusion is that structural setting conditions the effects of household routines on burglary victimization. The strength and direction of relationships between household characteristics and burglary victimization often shifted depending on social orders. Household size was positively related to burglary risk, but its effects were enhanced in a setting characterized by a relatively large youth population in a community with weak social orders. Similarly, the gender of household heads was a positive risk factor in settings characterized by single heads of households and weak social orders. With other types of household dynamics, the influence of neighborhood context changes and weak social orders do not seem to exacerbate risk factors. Frequent visiting outside of one's neighborhood was not a risk factor in the two groups of neighborhoods with the weakest social orders.

In fact, the strongest effects for linkage into the parochial order appeared in Group 2, which had a middle ranking between the lower rated Group 3 and the more highly ranked Group 1. This pattern of effects suggests that a threshold level may exist when it comes to the parochial dimension's contribution to systemic order. In Group 3, linkage to the relatively weak parochial order was insufficient to convey guardianship benefits, although the direction of effects was as predicted. The stronger parochial order at the ecological level in Group 2 suggests that linkages to it translate into systemic control of burglary.

Although the effects of linkages to the parochial order were not statistically significant in Group 1, the direction of effects reversed in this group compared with the other groups. Because this group had the highest ranking for this dimension of social order, the different direction of effects suggests some intriguing aspects of the relationship between parochial order and burglary victimization. One implication is that there may be a point of diminishing returns with respect to the emergence of social control from the parochial order linkages. It may be that there is a point at which further improvement in an already strong parochial order will not produce increased guardianship. This does not deny that strengthening the parochial order may convey other

benefits for the quality of life enjoyed by neighborhood residents, but additional protection from burglary might not be among them.

Another interpretation for this pattern of results may be that the parochial social order takes on different meanings within different neighborhood contexts. The parochial order networks that develop in poor neighborhoods may be substantively different from the parochial networks that appear in more affluent neighborhoods. For example, the informal networks in affluent neighborhoods may be rated highly, but residents' lives are separate and unconnected because of lifestyle differences. The character of informal relationships may be greatly influenced by work and involvement with schools and organizations that are not centered in the neighborhoods. This has the effect of stretching the informal network, thereby weakening control. On the other hand, whereas parochial networks in less affluent areas are rated as weaker, people's daily lives are constrained to the neighborhood areas. This results in a relatively dense informal network, which is able to convey some systemic control. These results indicate that systemic control emerges from neighborhood social order, which influences victimization by affecting the level of guardianship available to protect households from burglary. Additional victimization research is necessary to sort through the different explanations.

CONCLUSION

The systemic model guides the study of neighborhoods and crime away from the pathological aspects historically associated with social disorganization and toward a viewpoint that stresses different types of social organization. Social disorganization theory emphasized that weaknesses in social organization resulting from a variety of sources (poverty, heterogeneity, and population mobility) accounted for crime. In contrast, the systemic model deemphasizes the role of disorganization in favor of a perspective that examines the role all types of social organization contribute to victimization opportunities. The point, as critics of early social disorganization theory pointed out (e.g., Pfohl, 1985), is not disorganization (which implies a value judgment),

but differential organization. Criminal victimization arises in part from structural sources regardless of how the area is socially organized. For example, household routines influenced burglary victimization in Group 1, including in the individual neighborhood of Beverly, which was not disorganized in the traditional sense or weak with respect to social order. In some cases, the risk factors were the same for differentially organized neighborhoods; in others, they differed.

Some neighborhoods had stronger social orders than did others, and some undoubtedly had more desirable qualities of life, but all had features that either enhanced or restricted victimization opportunities. A theoretical approach that emphasizes a structural perspective that does not carry with it an implicit judgment of superiority is a step forward because it links the theoretical consideration of victimization to community theory. It avoids the middle-class bias of traditional disorganization theory and grounds the study of crime and victimization in community ecological structures. The emphasis is on the relationship between victimization and the social processes that characterize daily life in urban neighborhoods. It is not so much disorganization that matters; instead, it is critical to understand how aspects of different organizational characteristics combine to increase or decrease victimization risk through social order.

This is a positive development in our theoretical understanding of the relationship between community characteristics and crime. Social disorganization was severely criticized on several fronts, including its tautological character and middle-class bias regarding the social structure (Bursik, 1988; Pfohl, 1985). These and other criticisms of traditional social disorganization led to its demise as a guiding framework for criminological research (Liska, 1981). The systemic model responded to these criticisms by reconceptualizing disorganization as variations in social structure and the varying levels of systemic social order that emerge. As the results reported here illustrate, all structural arrangements have features that inhibit and facilitate victimization. By relying on the systemic model, future research can concentrate on further specifying how various social order features interact with residents' routines to influence victimization rates.

REFERENCES

Bellair, P. E. (2000). Informal surveillance and street crime: A complex relationship. *Criminology*, *38*, 137-170.

Bursik, R. J., Jr. (1988). Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology*, *26*, 519-551.

Bursik, R. J., Jr., & Grasmick, H. G. (1993). *Neighborhoods and crime: The dimensions of effective community control*. New York: Lexington Books.

Cohen, L. E. (1981). Modeling crime trends: A criminal opportunity perspective. *Journal of Research in Crime and Delinquency*, *18*, 138-164.

Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends. *American Sociological Review*, *44*, 588-608.

Greenberg, S. W., & Rohe, W. M. (1986). Informal social control and crime prevention in modern urban neighborhoods. In R. B. Taylor (Ed.), *Urban neighborhoods: Research and policy* (pp. 79-122). New York: Praeger.

Hunter, A. J. (1985). Private, parochial, and public social orders: The problem of crime and incivility in urban communities. In G. D. Suttles & M. N. Zald (Eds.), *The challenge of social control: Citizenship and institution building in modern society* (pp. 230-242). Norwood, NJ: Ablex.

Liska, A. E. (1981). *Perspectives on deviance*. Englewood Cliffs, NJ: Prentice Hall.

Pfohl, S. J. (1985). *Images of deviance and social control*. New York: McGraw-Hill.

Rengert, G. F., & Wasilchick, J. (1985). *Suburban burglary: A time and place for everything*. Springfield, IL: Charles C Thomas.

Robinson, M. B., Faust, F. L., & Elliott, C. T. (1994, November). *Routine activities and burglary victimization in student housing*. Paper presented at the 46th annual meeting of the American Society of Criminology, Miami, Florida.

Rountree, P. W., Land, K., & Miethe, T. D. (1994). Macro-micro integration in the study of victimization: A hierarchical logistic model analysis across Seattle neighborhoods. *Criminology*, *32*, 387-414.

Sampson, R. J. (1995). The community. In J. Q. Wilson & J. Petersilia (Eds.), *Crime* (pp. 193-216). San Francisco: ICS Press Institute for Contemporary Studies.

Sampson, R. J. (1991). Linking the micro- and macro-dimensions of community social organization. *Social Forces*, *70*, 43-64.

Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social disorganization theory. *American Journal of Sociology*, *94*, 774-802.

Sampson, R. J., & Lauritsen, J. L. (1990). Deviant lifestyles, proximity to crime, and the offender-victim link in personal violence. *Journal of Research in Crime and Delinquency*, *27*, 110-139.

Smith, D. A. (1989). Household characteristics, neighborhood composition, and victimization risk. *Social Forces*, *68*, 621-640.

Taub, R. P., Taylor, D. G., & Dunham, J. D. (1984). *Paths of neighborhood change: Race and crime in urban America*. Chicago: University of Chicago Press.

Taylor, R. B. (1997). Social order and disorder of street blocks and neighborhoods: Ecology, microecology, and the systemic model of social disorganization. *Journal of Research in Crime and Delinquency*, *34*, 113-155.

Warren, R. L. (1978). *The community in America* (3rd ed.). Chicago: Rand McNally.

Wright, R., & Decker, S. (1994). *Burglars on the job*. Boston: Northeastern University Press.

Yang, S., & Hoffmann, J. P. (1994, November). *A multi-level assessment of social disorganiza-tion theory in Taipei, Taiwan*. Paper presented at the 46th annual meeting of the American Society of Criminology, Miami, Florida.