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Community Structure and Crime: Testing Social-Disorganization Theory[1]

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Shaw and McKay's influential theory of community social disorganization has never been directly tested. To address this, a community-level theory that builds on Shaw and McKay's original model is formulated and tested. The general hypothesis is that low economic status, ethnic heterogeneity, residential mobility, and family disruption lead to community social disorganization, which, in turn, increases crime and delinquency rates. A community's level of social organization is measured in terms of local friendship networks, control of street-corner teenage peer groups, and prevalence of organizational participation. The model is first tested by analyzing data for 238 localities in Great Britain constructed from a 1982 national survey of 10,905 residents. The model is then replicated on an independent national sample of 11,030 residents of 300 British localities in 1984. Results from both surveys support the theory and show that between-community variations in social disorganization transmit much of the effect of community structural characteristics on rates of both criminal victimization and criminal offending.

One of the most fundamental sociological approaches to the study of crime and delinquency emanates from the Chicago-school research of Shaw and McKay. As Bursik (1984) and others (see, e.g., Morris 1970; Short 1969) have argued, few works in criminology have had more influence than *Juvenile Delinquency and Urban Areas* (1942, 1969). In this classic work, Shaw and McKay argued that three structural factors—low economic status, ethnic heterogeneity, and residential mobility—led to

the disruption of community social organization, which, in turn, accounted for variations in crime and delinquency (see also Shaw et al. 1929). However, while past researchers have examined Shaw and McKay's predictions concerning community change and extralocal influences on delinquency (Bursik and Webb 1982; Bursik 1986; Heitgerd and Bursik 1987), no one has directly tested their theory of social disorganization.

First, most ecological researchers inspired by Shaw and McKay have examined the effects of such characteristics as median income, racial composition, and residential mobility on crime rates (see, e.g., the reviews in Kornhauser 1978; Bursik 1984; Byrne and Sampson 1986). While useful as a preliminary test, this strategy does little to verify and refine social-disorganization theory since it does not go beyond the steps already taken by Shaw and McKay. As Kornhauser (1978) argues, most delinquency theories begin with the same independent variables—especially socioeconomic status (SES). But the variables that *intervene* between community structure and delinquency are at issue here and to test the theory adequately "it is necessary to establish the relationship to delinquency of the interpretive variables it implies" (Kornhauser 1978, p. 82).

To be sure, the lack of direct tests of the Shaw and McKay thesis does not stem from a lack of theoretical insight. On the contrary, the major problem has been a lack of relevant data. For example, Heitgerd and Bursik (1987) provide an important test of the ecological implications of social-disorganization theory but conclude that traditional ecological studies (including their own) are not well suited to an examination of the formal and informal networks hypothesized to link community social structure and crime. Such an examination requires extensive and prohibitively expensive data collection within each of the communities in the analysis (Heitgerd and Bursik 1987, p. 785). Similarly, Reiss (1986a, pp. 26–27) notes that, since governments gather very little information on the collective properties of administrative units for which they routinely report information, "little causal information is available for those same units."

Thus, the crux of the problem is that previous macro-level research in crime and delinquency has relied primarily on census data that rarely provide measures for the variables hypothesized to mediate the relationship between community structure and crime. Ethnographic research (e.g., Suttles 1968) is an exception to this pattern in that it provides rich descriptive accounts of community processes central to theoretical concerns. But, as Reiss (1986a, p. 27) argues, ethnographies provide limited tests of theories because they focus on a single community or, at most, on a cluster of neighborhoods in which community properties do not display

sufficient variation. And while some researchers have examined quantitative dimensions of informal social control (see, e.g., Maccoby, Johnson, and Church 1958; Kapsis 1976; Simcha-Fagan and Schwartz 1986), their studies have been limited to a few select communities, precluding comprehensive multivariate analysis. Consequently, since Shaw and McKay's macrosocial theory is primarily about *between-community* differences in social disorganization (Kornhauser 1978, p. 83), no one has undertaken crucial empirical tests of the community-level implications of the theory.

The second reason that Shaw and McKay's theory has not been tested directly is the overreliance on official crime rates in past research. The general criticisms of official data are well known and need not be repeated here. Suffice it to say that the major issue with respect to community research concerns the extent to which official delinquency rates reflect ecological biases in official reaction to delinquent behavior (Hagan, Gillis, and Chan 1978; Smith 1986; Sampson 1986). For example, conflict theorists argue that lower-economic-status communities may have higher delinquency rates in part because police concentration is greater there compared with higher-status areas. Further, the type of community in which police-citizen encounters occur may influence the actions taken by police (Hagan et al. 1978; Sampson 1986). In support of this idea, Smith (1986) demonstrated that the probability of arrest across communities declines substantially with increasing socioeconomic status—independent of crime type and other correlates of arrest decisions.

The reliance on official data thus leaves open the question of whether Shaw and McKay's findings, and the host of census-based studies following them, are in part artifactual. In the past 20 years or so, self-report and victimization data have been brought to bear on the validity of official statistics (see Hindelang, Hirschi, and Weis 1981), but, to date, these alternative sources of crime measurement have had little effect on the question at issue. For their part, self-report studies have generally been either national in scope (e.g., Elliott and Ageton 1980) or specific to one locale (e.g., Hindelang et al. 1981); between-community estimates of crime rates based on self-reports are thus nonexistent across a representative number of communities. Victimization rates, on the other hand, have been analyzed across 26 cities sampled in the National Crime Survey in the early 1970s (e.g., Decker, Shichor, and O'Brien 1982). But Shaw and McKay's theory is about local community variations in crime rates, not large aggregates such as cities and SMSAs (Bursik 1984). More important, even users of victimization surveys have been forced to rely on census data to measure community structure (see also Sampson 1985).

It is the goal of this article to address these two fundamental limitations of past research. To this end, we use recent data from a large national

survey of Great Britain to construct community-level measures of both exogenous structural factors and the mediating dimensions of social disorganization. Using self-reported data on both criminal offending and criminal victimization, we also construct crime and delinquency rates that are not dependent on the official reaction of the criminal-justice system. The unique design of the British Crime Survey (BCS) enables us to create measures of both social disorganization and crime rates for more than 200 local communities and, therefore, to test directly basic hypotheses derived from Shaw and McKay's community-level theory of crime and delinquency.

A COMMUNITY-LEVEL THEORY OF SOCIAL DISORGANIZATION

In general terms, social disorganization refers to the inability of a community structure to realize the common values of its residents and maintain effective social controls (Kornhauser 1978, p. 120; Bursik 1984, p. 12).[2] Empirically, the structural dimensions of community social disorganization can be measured in terms of the prevalence and interdependence of social networks in a community—both informal (e.g., friendship ties) and formal (e.g., organizational participation)—and in the span of collective supervision that the community directs toward local problems (Thomas and Znaniecki 1920; Shaw and McKay 1942; Kornhauser 1978).[3] This approach is grounded in what Kasarda and Janowitz (1974, p. 329) term the *systemic model,* in which the local community is viewed as a complex system of friendship and kinship networks and formal and informal associational ties rooted in family life and ongoing socialization processes (see also Sampson 1988). As Bursik (1984, p. 31) notes, the correspondence of the systemic model with Shaw and McKay's social-disorganization model lies in their shared assumption that structural barriers impede development of the formal and informal ties that promote the ability to solve common problems. Social organization and social *dis*organization are thus seen as different ends of the same continuum with respect to systemic networks of community social control. When formulated in such a way,

[2] As Janowitz (1975) emphasizes, social control should not be equated with social repression but rather with the collective pursuit of shared values that are rewarding and meaningful. In this regard, we assume that residents of an area value a relatively crime-free existence (Bursik 1984, p. 12). Given the consistent findings on public rankings of the seriousness of crime, this does not seem problematic (see Kornhauser 1978, pp. 214–18).

[3] Because of data and space constraints, our focus in this paper is on the structural dimensions of social disorganization. For an extensive discussion of the cultural components of social disorganization and the cultural-deviance portion of Shaw and McKay's "mixed model" of delinquency, see Kornhauser (1978, pp. 62–78).

the notion of social disorganization is clearly separable not only from the processes that may lead to it (e.g., poverty and mobility), but also from the degree of delinquent behavior that may result from it (see Bursik 1984, p. 14).

Intervening Dimensions of Social Disorganization

The first and most important intervening construct in Shaw and McKay's disorganization model was the *ability of a community to supervise and control teenage peer groups* (e.g., gangs). It has been well documented that delinquency is primarily a group phenomenon (Thrasher 1963; Shaw and McKay 1942; Short and Strodtbeck 1965; Reiss 1986b), and hence, according to Shaw and McKay, the capacity of the community to control group-level dynamics is a key mechanism linking community character-istics with delinquency. Indeed, a central fact underlying Shaw and McKay's research was that most gangs developed from unsupervised, spontaneous play groups (Thrasher 1963, p. 25; Bordua 1961, p. 120). Shaw and McKay (1969) thus argued that residents of cohesive com-munities were better able to control the teenage behaviors that set the context for group-related delinquency (Thrasher 1963, pp. 26–27; Short 1963, p. xxiv; Short and Strodtbeck 1965). Examples of such controls include supervision of leisure-time youth activities, intervention in street-corner congregating (Thrasher 1963, p. 339; Maccoby et al. 1958; Shaw and McKay 1969, pp. 176–85; Bordua 1961), and challenging youth "who seem to be up to no good" (Skogan 1986, p. 217). Theoretically, then, the suggestion is that communities that are unable to control street-corner teenage groups will experience higher rates of delinquency than those in which peer groups are held in check through collective social control.

Socially disorganized communities with extensive street-corner peer groups are also expected to have higher rates of adult crime, especially among younger adults who still have ties to youth gangs. As Thrasher (1963, p. 281) argued: "There is no hard and fast dividing line between predatory gangs of boys and criminal groups of younger and older adults. They merge into each other by imperceptible gradations, and the latter have their real explanation, for the most part, in the former." Similarly, Shaw and McKay pointed to the link between juvenile delinquency and adult criminality, reporting a correlation of .90 between delinquency rates of juveniles aged 10–16 and referral rates of young adults aged 17–20 (1969, p. 95). They further noted the "striking" fact that over 70% of the juveniles in high-gang-delinquency areas were arrested as adults (Shaw and McKay 1969, p. 134). Therefore, the general hypothesis derived from the basic Shaw and McKay model is that street-corner

teenage peer groups will have a positive effect on both crime and delinquency rates.

A second dimension of community social organization is informal *local friendship networks*. Systemic theory holds that locality-based social networks constitute the core social fabric of human ecological communities (Hunter 1974; Kasarda and Janowitz 1974). When residents form local social ties, their capacity for community social control is increased because they are better able to recognize strangers and more apt to engage in guardianship behavior against victimization (Skogan 1986, p. 216).

Relatedly, Krohn (1986) has examined the theoretical consequences of social-network theory for delinquency causation. Network density refers to the extent to which all actors in a social network are connected by direct relations. When network density is high, the ability to control delinquency is increased because the behavior of participants in such a network is potentially subject to the reactions of all network members. Hence, the greater the density of networks among persons in a community, the greater the constraint on deviant behavior within the purview of the social network (Krohn 1986, p. 84).

But, as both Krohn (1986) and Freudenberg (1986) point out, the network density of acquaintances and friendships has been largely ignored in past research. To correct for this, we conceptualize local friendship networks as a community-level structural characteristic. On the basis of systemic theory, we expect that local friendship networks will (a) increase the capacity of community residents to recognize strangers, thereby enabling them to engage in guardianship behavior against predatory victimization and (b) exert structural constraints on the deviant behavior of residents within the community. Hence, local friendship networks are hypothesized to reduce both predatory victimization rates and local crime and delinquency offender rates.

A third component of social organization is the rate of *local participation in formal and voluntary organizations*. Community organizations reflect the structural embodiment of local community solidarity (Hunter 1974, p. 191), and, with this in mind, Kornhauser (1978, p. 79) argues that institutional instability and the isolation of community institutions are key factors underlying the structural dimension of social disorganization. Her argument, in short, is that when links between community institutions are weak, the capacity of a community to defend its local interests is weakened. Shaw and McKay (1969, pp. 184–85), and more recently Simcha-Fagan and Schwartz (1986, p. 688), have also argued that a weak community organizational base serves to attenuate local social-control functions regarding youth.

Taken together, these theorists suggest that efforts to solve common problems (e.g., predatory victimization) and socialize youth against delin-

quency are to a large degree dependent on a community's organizational base. The key to the success of these efforts hinges on the community's ability to encourage high rates of participation in both formal groups and voluntary associations (Shaw and McKay 1969, pp. 322–26; Kornhauser 1978, p. 81; Simcha-Fagan and Schwartz 1986, p. 688). Consequently, we hypothesize that communities with high rates of participation in committees, clubs, local institutions, and other organizations will have lower rates of victimization and delinquency than communities in which such participation is low.

Exogenous Sources of Social Disorganization

According to Kornhauser's (1978, p. 83) theoretical interpretation of Shaw and McKay, "economic level, mobility, and heterogeneity are, in that order, the variables assumed to account for variations in the capacity of subcommunities within a city to generate an effective system of controls." *Socioeconomic status* (SES) has long been a mainstay ecological correlate of crime and delinquency (Kornhauser 1978; Bursik 1984; Byrne and Sampson 1986), and Shaw and McKay placed a heavy emphasis on how community social disorganization mediated the effects of SES on delinquency. By definition, they argued, communities of low economic status lack adequate money and resources. In conjunction with the well-established positive correlation between SES and participation in formal and voluntary organizations (Tomeh 1973, p. 97), the model suggests that low-socioeconomic-status communities will suffer from a weaker organizational base than higher-status communities. The effects of SES on crime and delinquency rates are thus hypothesized to operate primarily through formal and informal controls as reflected in organizational participation and community supervision of local youth. Most previous ecological research has attempted to establish direct effects of SES on crime (see Kornhauser 1978; Byrne and Sampson 1986) and has consequently failed to measure the hypothesized mediating links necessary to corroborate social-disorganization theory.

In Shaw and McKay's (1942) original model, *residential mobility* was hypothesized to disrupt a community's network of social relations (Kornhauser 1978). In a similar vein, Kasarda and Janowitz (1974, p. 330) argue that, since assimilation of newcomers into the social fabric of local communities is necessarily a temporal process, residential mobility operates as a barrier to the development of extensive friendship networks, kinship bonds, and local associational ties. In this study, we examine a macrosocial conceptualization of systemic theory by focusing on the consequences of residential stability for community organization. The spe-

cific hypothesis is that community residential stability has direct positive effects on local friendship networks, which, in turn, reduce crime.

The third source of social disorganization in the Shaw and McKay model was racial and ethnic *heterogeneity,* which was thought to thwart the ability of slum residents to achieve consensus. In Suttles's (1968) account, fear and mistrust accompany heterogeneity, pushing residents into associations selected on the basis of personalistic criteria (e.g., age and sex). As a result of these defensive associations, the social order of the slum becomes segmented, provincial, and personalistic. Hence, while various ethnic groups may share conventional values (e.g., reducing crime), heterogeneity impedes communication and patterns of interaction.

Again, like mobility and SES, heterogeneity has usually been assessed only in terms of its direct effects on crime. In contrast, we test the basic disorganization postulate by hypothesizing that variations in ethnic heterogeneity will also increase delinquency by weakening the mediating components of social organization—especially control of disorderly peer groups.

Family disruption.—In a recent contribution to this *Journal,* Sampson (1987) argued that marital and family disruption may decrease informal social controls at the community level. The basic thesis was that two-parent households provide increased supervision and guardianship not only for their own children and household property (Cohen and Felson 1979), but also for general activities in the community. From this perspective, the supervision of peer-group and gang activity is not simply dependent on one child's family, but on a network of collective family control (Thrasher 1963, pp. 26, 65, 339; Reiss 1986a). In support of this theoretical model, Sampson (1987) showed that macro-level family disruption had large direct effects on rates of juvenile crime by both whites and blacks. However, the analysis was based on city-level rather than local community data, and empirical measures of hypothesized intervening constructs (e.g., informal community supervision of peer groups) were not available. Sampson (1987, p. 376) thus emphasized that "definitive resolution of the mechanisms linking family disruption with crime rates must await further research."

The present study addresses this limitation by examining the mediating effects of community social organization on crime. In particular, we hypothesize that community-level family disruption has a direct positive effect on the prevalence of street-corner teenage peer groups, which, in turn, increases rates of crime and delinquency.

Urbanization.—The fifth and final exogenous variable to be examined is level of urbanization. Although Shaw and McKay (1942) were primarily concerned with intracity patterns of delinquency, their theoretical

framework is consistent with the idea that urban communities have a decreased capacity for social control, compared with suburban and rural areas. In particular, urbanization may weaken local kinship and friendship networks and impede social participation in local affairs (see, e.g., Fischer 1982). To provide a strict test of our hypothesized effects of community structure on crime, we thus control for between-community variations in urbanization.

In sum, our extended model of Shaw and McKay relies on the theoretical explication of Kornhauser (1978), recent contributions of systemic and social-network theory (Kasarda and Janowitz 1974; Krohn 1986), and a macrosocial conceptualization of family disruption and crime (Sampson 1987). The general causal structure of the direct and indirect effects of community theoretical constructs is represented in figure 1.[4]

DATA AND METHODOLOGY

The main data analyzed in this study come from the first British Crime Survey (BCS), a nationwide survey of England and Wales conducted in 1982 under the auspices of the Research and Planning Unit of the Home Office. The unique advantage of the BCS for present purposes is that, unlike most survey research, it facilitates macro-level community analysis. The reason for this is that sampling procedures resulted in the proportionate selection of 60 addresses in *each* of 238 ecological areas in Great Britain.[5] A favorable 80% response rate from persons 16 and older randomly selected from 13,702 nonempty households generated the final sample ($N = 10,905$), distributed across the 238 localities. The sample

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[4] Before we test fig. 1, we should emphasize that Shaw and McKay's theory was primarily about *indigenous* community social control. It is quite possible that weak local ties among residents are counterbalanced by strong ties to external institutions and larger (e.g., national) friendship networks (see Granovetter 1973). But while extralocal ties among many urbanites may be strong (Fischer 1982), they do not necessarily bear on local social control (see Shaw and McKay 1969, p. 185).

[5] Specifically, in the first stage of enumeration, 238 of the 552 parliamentary constituencies in England and Wales (including London) were selected with probability proportional to the electorate (Hough and Mayhew 1983, p. 38). Then, in 119 of the constituencies, 119 electoral wards were sampled with probability proportional to the electorate. In the other 119 areas, two polling districts were selected, also with probability proportional to the electorate. Finally, within each sampling unit, addresses were chosen with probability proportional to the number of electors listed there (60 in each ward, 30 in each of the two polling districts). Preliminary analysis showed no meaningful design effects of wards vs. polling districts on the substantive results, and we therefore examine all 238 areas.
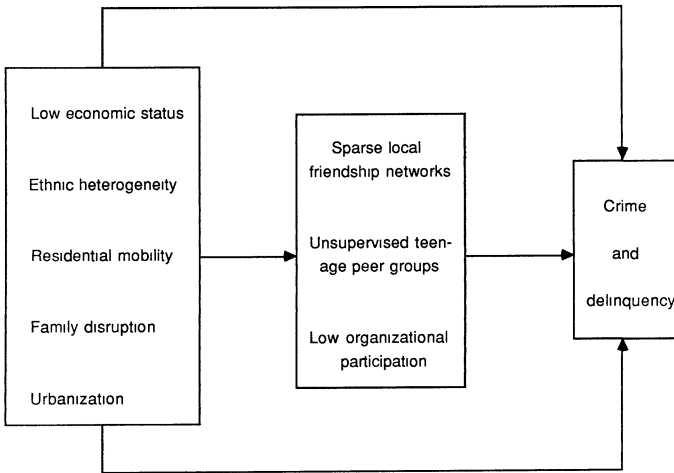
Fig. 1.—Causal model of extended version of Shaw and McKay's theory of community systemic structure and rates of crime and delinquency.

drawn from each geographical unit is representative of a relatively small locality that reasonably approximates the concept of "local community."[6]

Most national samples include too few persons in any one geographic area for the construction of community-level variables (Reiss 1986a). In contrast, the within-area BCS samples are large enough (average = 46), and the survey instrument so comprehensive, that one can construct theoretically relevant and reliable community variables that are not dependent on census data. Therefore, using the geographical area identifiers for each household, we aggregated responses to selected survey questions within each of the 238 areas and constructed structural variables (e.g., means and percentages).

On the basis of the theoretical model developed above, we constructed empirical measures of the three endogenous dimensions of community social organization. The indicator of local friendship networks is derived from a question in which respondents were asked how many of their friends (on a five-point scale ranging from none to all) resided in the local community, which was defined as the area within a 15-minute walk of the

[6] The average size of wards in England and Wales is just over 5,000 (see Office of Population Censuses and Surveys 1984, pp. xi, 2). While areal boundaries were administratively defined, we believe that the geographical size of sampling units, in conjunction with the sampling procedures, justifies using the 238 ecological areas to approximate local communities.

respondent's home. Note that the "15-minute walk" survey definition meshes well with the relatively compact geographical size of each sampled area. Our community indicator is empirically defined as the mean level of local friendships and is intended to reflect the extent of local ties and friendship networks among community residents.

The macro-level indicator of organizational participation was created from a question in which respondents were asked about their social and leisure activities for each night of the week, broken down by type of activity. One of the categories was attendance at the meetings of committees and clubs. The resulting structural measure refers to the percentage of residents who participated in such meetings in the week before the interview. Although a more detailed measure is unavailable, we believe that variations across communities in attendance at committee, club, and other organizational activities provide a reasonable indicator of mobilization capacity and organizational base (see Kornhauser 1978, pp. 79–80).

A direct indicator of the social control and supervision of youth peer groups is typically hard to come by in macro-level data. However, the BCS provides a fairly straightforward indicator of youth-supervision patterns that is conceptually and empirically independent of crime itself. Specifically, each respondent was asked how common it was (on a four-point scale) for groups of teenagers to hang out in public in the neighborhood and make nuisances of themselves. Separate questions were asked regarding crime—including common youth crimes such as vandalism. The problem of disorderly teenage youth hanging about in groups in public thus has face validity as an indicator of the extent to which the community is unable to control peer-group dynamics (see Maccoby et al. 1958; Bordua 1961; Thrasher 1963). We therefore aggregated the individual responses in each area and computed the percentage of residents who reported that disorderly teenage peer groups were a "very common" neighborhood problem.

The three exogenous community characteristics from the original Shaw and McKay model are SES, residential stability, and ethnic heterogeneity. To measure SES, we constructed a scale by summing z-scores of the major dimensions of social class—education (percentage college educated), occupation (percentage in professional and managerial positions), and income (percentage with high incomes). Residential stability is defined as the percentage of residents brought up in the area within a 15-minute walk from home. Race/ethnicity in the BCS sample is distributed across five categories: white, West Indian or African black, Pakistani or Bangladeshi Indian, other nonwhite, and mixed. To capture fully the range of heterogeneity, we use an index employed in recent research on intergroup relations (Blau 1977, p. 78). The index is $(1 - \Sigma p_i^2)$, where p_i is the fraction of the population in a given group. Note that the measure

takes into account both the relative size and number of groups in the population, with a score of one reflecting maximum heterogeneity.

On the basis of our theoretical extension of Shaw and McKay derived from Sampson (1987), family disruption is included as a fourth exogenous community characteristic. Family disruption is measured by summing z-scores of two related dimensions—the proportion of divorced and separated adults among those who had ever married and the percentage of households with single parents with children. And the final exogenous variable, urbanization, is controlled for by our assigning all communities located in central-city locations a dummy variable of one and all others a zero (see Hough and Mayhew 1983).[7]

The most general test of social-disorganization theory concerns its ability to explain total crime rates. Accordingly, to serve as an overall indicator of crime, we constructed the *total victimization rate*. To reflect between-community variations in serious predatory crimes against persons, we also constructed measures of *mugging/street robbery* and *stranger violence* (assault and rape). The mugging/robbery variable was derived from aggregation of the responses to a question in which respondents were asked how prevalent such crimes were in their local community. Knowledge of criminal victimization of other than respondents is thus reflected in the measure (see Skogan 1986). Conversely, both the stranger violence and total victimization rates were constructed from respondents' reports of their victimization experiences during the previous year, aggregated to the community level. Specifically, each victim of assaultive violence (rape or assault) was asked if the offender(s) was a stranger or acquaintance. The resulting rate of stranger violence reflects the prevalence of predatory attacks by stranger(s). Total victimization refers to the prevalence of all personal and household crimes. To the extent that these indicators of victimization measured in different ways yield similar patterns, they give us more confidence in the validity of results.

To measure property and household victimization, we constructed three measures from victim reports—*burglary, motor vehicle theft,* and *vandalism* to home or property. Note that juveniles are involved in property crimes much more than in violent crimes (Flanagan and McLeod 1983, p. 402). Vandalism, in particular, may be seen as a general proxy for juvenile delinquency.

The theory of social disorganization speaks not only to the ability of a community to achieve common values (e.g., to defend itself against pred-

[7] At the aggregate level, the dummy variable for urbanization also serves to control for the overrepresentation of inner-city communities in the sample (see Hough and Mayhew 1983, p. 38).

atory victimization), but also to community processes that produce of-
fenders. Indeed, Shaw and McKay's (1942, 1969) analyses focused mostly
on rates of delinquent offending (e.g., court referral rates per 1,000 local
youth). We also examine offending rates, but to counteract official reac-
tion biases, we derived rates of offending from *self-reported* data. Using
show-card methods, the interviewer asked each respondent to report his
or her involvement in various deviant and illegal activities. Many of these
acts are not germane to the present study (e.g., drunk driving and occu-
pational theft) and many serious crimes occurred too infrequently to study
reliably (e.g., major theft and burglary). We thus constructed two mea-
sures tapping behaviors that are directly relevant to this study and that
permit reliable analysis. Specifically, measures of self-reported *personal
violence* (e.g., started a fight with someone outside the family, deliber-
ately injured someone outside the family, or carried a weapon in a fight)
and *property theft/vandalism* (e.g., defaced wall, did deliberate property
damages to car, house, phone booth; took things from shops, stores, etc.
without paying for them) were created for each person. Because even
these offenses were relatively infrequent, the resulting rates represent
between-community variations in the prevalence of self-reported offend-
ing against persons and property.[8]

FINDINGS

The most notable feature of the descriptive statistics displayed in table 1
is that communities do vary significantly along theoretically relevant di-
mensions. For example, although a third of residents were brought up in
the community, residential stability varies from a low of zero to almost
75%. The variables tapping the three intervening community factors also
vary widely: for example, the prevalence of unsupervised peer groups in a

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[8] Preliminary inspection of descriptive data revealed that rates of the most serious
crimes (e.g., robbery, stranger violence, burglary) were highly skewed. For example,
in raw form, the rate of stranger violence had skewness and kurtosis values of 2.4 and
10.1, respectively. To induce normality, we took the natural logarithms (+1) of vic-
timization rates that had skewness and kurtosis values greater than one. Self-reported
offending rates were also skewed, and, hence, they too were logged. Further, it should
be noted that the six self-reported delinquency items, along with the two questions
about local friendships and organizational participation, were asked in a follow-up
interview of all victims and a random selection (40%) of nonvictims ($N = 6,329$).
Hence, the structural variables referring to friendship networks, organizational par-
ticipation, and the two offending rates are based on an average within-area sample size
of 27. Because victims were oversampled in the follow-up (see Hough and Mayhew
1983, pp. 39–40), the individual-level responses were weighted to restore representa-
tiveness before community variables were constructed. All other aggregate measures
were constructed from the full sample of 10,905 persons.

TABLE 1

DESCRIPTIVE STATISTICS FOR MAJOR VARIABLES, 238 BRITISH
LOCAL COMMUNITIES (1982)

Variable	Mean	SD	Min.	Max.
Exogenous:				
Socioeconomic status*	.00	2.48	−4.02	9.69
Ethnic heterogeneity	.08	.14	.00	.65
Residential stability	32.99	15.06	.00	72.50
Family disruption*	.00	1.72	−2.09	6.66
Urbanization	.20	.40	.00	1.00
Intervening:				
Local friendship networks	2.52	.38	1.56	3.73
Unsupervised peer groups	37.38	14.44	.00	76.40
Organizational participation	8.66	6.94	.00	34.60
Victimization rates:				
Mugging/street robbery†	2.13	1.35	.00	4.48
Stranger violence†	.96	.79	.00	3.07
Total crime	41.99	16.55	9.10	93.30
Burglary†	1.54	.87	.00	3.39
Motor-vehicle theft†	1.18	1.02	.00	3.32
Vandalism	7.03	5.48	.00	28.60
Offending rates:				
Personal violence†	1.31	.96	.00	3.08
Theft/vandalism†	.42	.79	.00	2.59

* Scale based on z-scores.
† Natural log transformation.

community ranges from zero to over 75%, while organizational participation of community residents ranges from none to over a third. We now address the nature of these variations with respect to the theory.

The first two columns in table 2 reveal clear support for our linkage of Shaw and McKay's (1942) social-disorganization theory with Kasarda and Janowitz's (1974) systemic model of community attachment.[9] Net of urbanization, SES, heterogeneity, and family disruption, residential stability has a large direct effect (B = .42) on local friendship networks. Urbanization also has a negative effect on friendship networks, as expected, but its magnitude is considerably smaller than residential stability.

[9] Because the number of individual cases used to create the aggregate measures varied slightly by community, the variance of the residuals is not constant. Therefore, weighted-least-squares (WLS) regression is used to induce homoscedasticity of error variances: each case is weighted by the square root of the unweighted sample size (Hanushek and Jackson 1977, pp. 143, 152).

TABLE 2

WLS Regression Estimates of Effects of Community Structure on
Dimensions of Social Disorganization in 238 British Local Communities (1982)

	Local Friendship Networks		Unsupervised Peer Groups		Organizational Participation	
	B	t-ratio	B	t-ratio	B	t-ratio
Socioeconomic status	−.06	−.91	−.34	−5.31**	.17	2.33**
Ethnic heterogeneity	.02	.34	.13	2.04**	−.06	−.83
Residential stability	.42	6.35**	.12	1.90*	−.09	−1.26
Family disruption	−.03	−.45	.22	3.73**	−.02	−.28
Urbanization	−.27	−3.91**	.15	2.21**	−.10	−1.32
R^{2a}	.26		.30		.07	

[a] $P < .01$ for these values.
* $P < .10$.
** $P < .05$.

The data in columns 3 and 4 provide support for the most crucial
mediating variable in the social-disorganization model. As hypothesized
by Shaw and McKay, lower-class communities with fewer resources are
apparently unable to control or supervise youths' congregating to the
extent that upper-class communities can. Note that the standardized di-
rect effect of SES is substantial (−.34). And in support of the macro-level
social-control model proposed by Sampson (1987), communities with ele-
vated levels of family disruption experience higher levels of disorderly
peer-group behavior by teenagers than communities with lower levels of
family disruption. Also in consistency with the Shaw and McKay model,
urbanization and ethnic heterogeneity have significant positive effects on
the inability of a community to control its youth. The only unexpected
finding is the marginally significant positive effect of residential stability.

The results for organizational participation (cols. 5 and 6) indicate
weaker predictive power of community structural context, but the pat-
tern of effects is still consistent with the theory. As Shaw and McKay
hypothesized, community-level SES is the strongest determinant of or-
ganizational participation ($B = .17; P < .05$). Overall, the data support
the model and, in the process, the construct validity of key endogenous
dimensions of community social disorganization.

Rates of Personal Violence and Total Victimization

The structural-equation results in table 3 indicate that the level of un-
supervised teenage peer groups has the largest independent effect on all

TABLE 3

WLS Regression Estimates of Effects of Community Structure and Social
Disorganization on Rates of Personal Violence and Total Victimization
in 238 British Local Communities (1982)

| | PERSONAL VIOLENCE AND TOTAL VICTIMIZATION | | | | | |
| | Mugging/Street Robbery | | Stranger Violence | | Total Victimization | |
	B	t-ratio	B	t-ratio	B	i-ratio
Socioeconomic status	−.01	−.20	.10	1.30	−.03	−.48
Ethnic heterogeneity	.29	5.79**	.02	.26	.08	1.23
Residential stability	.08	1.53	−.09	−1.11	.03	.53
Family disruption	.08	1.78*	.14	2.02**	.20	3.61**
Urbanization	.26	5.01**	.11	1.36	.21	3.26**
Local friendship networks	−.19	−4.01**	−.03	−.48	−.12	−2.12**
Unsupervised peer groups	.35	7.01**	.19	2.60**	.34	5.58**
Organizational participation ..	−.07	−1.70*	−.14	−2.11**	−.11	−2.00**
R^{2a}	.61		.15		.42	

ᵃ $P < .01$ for these values.
* $P < .10$.
** $P < .05$.

three forms of victimization. Specifically, net of all other community characteristics, the indicator of unsupervised peer groups is substantially related to mugging and robbery (.35), stranger violence (.19), and the total victimization rate (.34). Furthermore, community SES has insignificant effects on all three types of victimization. These data thus provide an illustration of the misleading inferences that could be drawn from an attempt to identify only direct effects of social-stratification factors, such as SES. Indeed, 80% of the total effect of SES on mugging and street robbery is mediated by the indicator of unsupervised teenage youth. Similarly, 34% and 68% of the total effect of community SES on stranger violence and total victimization, respectively, is mediated by level of unsupervised peer groups.[10] And while ethnic heterogeneity has a fairly large direct effect on mugging/robbery (.29), the indicator of unsupervised peer groups transmits 47% of the effect of heterogeneity on stranger violence and 33% of its effect on total-victimization rates.

[10] Space limitations preclude the tabular presentation of reduced-form results and indirect effects in the structural equations for all eight crime rates. For simplicity, we present the direct effects in tables and discuss in the text the indirect-effect estimates and the proportion of the absolute value of total effects (see Alwin and Hauser 1981, p. 140) mediated by the intervening variables, as specified in the theoretical model.

The extent of community friendship ties is inversely related to both street robbery ($-.19$) and total victimization ($-.12$). The direct effect of residential stability on victimization is insignificant, and when we combine that result with the results in table 2, we conclude that the total effect of such stability on crime is accounted for in large part by local social networks. This conclusion confirms a key hypothesis linking the disorganization framework with recent developments in social-network theory (Krohn 1986). More precisely, we find that 39% of the total effect of community stability on mugging is mediated through local friendship networks, while the corresponding figure for total victimization is 38%.

Although modest in magnitude, the pattern of results for organizational participation also supports theoretical predictions. For example, organizational participation has significant ($P < .05$) negative effects on stranger violence and total personal crime and a marginally significant negative effect ($P < .10$) on rates of street mugging. Of the total effect of community socioeconomic status on stranger violence and total crime, organizational participation mediates about 12%.

Family disruption has indirect effects on all three types of victimization through its effect on disorderly teenage peer groups. The proportion of the total effects of family disruption accounted for by unsupervised youth is 50%, 23%, and 27% for mugging, stranger violence, and total victimization, respectively. Family disruption also has fairly substantial direct effects on the last two rates, a finding consistent with the argument that single-adult households provide increased opportunities for crime (Cohen and Felson 1979; Sampson 1987).

Rates of Household and Property Victimization

Columns 1 and 2 in table 4 reveal that all three mediating dimensions of community social organization have independent effects on burglary. In particular, the data suggest that communities characterized by extensive friendship networks, high organizational participation, and effective control of teenage peer groups have lower than average rates of burglary. It is especially interesting to note the important role of friendship networks, the variable with the second largest effect ($-.20$) on burglary. In conjunction with the fact that residential stability has an insignificant direct effect on burglary, the results again establish empirical support for the systemic, social-organizational approach. Specifically, one-half of the effect of community residential stability on burglary rates is mediated by friendship ties among local residents.

The indicator of disorderly peer groups has a significant positive effect on burglary (.18), motor-vehicle theft (.26), and vandalism (.38). The large effect on vandalism is particularly supportive of the theory since it is

TABLE 4

WLS REGRESSION ESTIMATES OF THE EFFECTS OF COMMUNITY STRUCTURE
AND SOCIAL DISORGANIZATION ON RATES OF HOUSEHOLD AND PROPERTY
VICTIMIZATION IN 238 BRITISH LOCAL COMMUNITIES (1982)

	HOUSEHOLD AND PROPERTY VICTIMIZATION					
	Burglary		Auto Theft		Vandalism	
	B	t-ratio	B	t-ratio	B	t-ratio
Socioeconomic status	.12	1.87*	−.13	−1.87*	−.16	−2.20**
Ethnic heterogeneity	.21	3.35**	.03	.52	−.10	−1.44
Residential stability	.05	.74	−.13	−1.83*	−.15	−1.96**
Family disruption	.15	2.68**	.13	2.14**	.09	1.35
Urbanization	.19	2.78**	.19	2.62**	−.00	−.03
Local friendship networks	−.20	−3.35**	−.03	−.53	−.07	−.97
Unsupervised peer groups	.18	2.82**	.26	3.92**	.38	5.32**
Organizational participation ...	−.15	−2.85**	−.18	−3.19**	−.04	−.65
R^{2a}		.39		.30		.21

[a] $P < .01$ for these values.
* $P < .10$.
** $P < .05$.

one of the most typical juvenile offenses and is usually committed in groups (Thrasher 1963; Shaw and McKay 1942). Note also that, if only direct effects were considered, we would conclude that community SES increases burglary—not an unreasonable finding since wealthier communities offer more to steal than poorer ones. But almost a third (28%) of the total effect of SES on burglary is mediated by disorderly peer groups; that is, SES reduces burglary indirectly through its effects on local control of teenage peer groups.

Organizational participation has a relatively strong negative effect on two out of the three property crimes: burglary (−.15) and motor-vehicle theft (−.18). This indicator of the structural embodiment of community social control also mediates a small part of the effect of community SES (approximately 12%). Only vandalism is unaffected by either friendship networks or organizational participation.

In short, our analyses support the view that community social disorganization accounts for much of the effect of community-level SES, residential stability, family disruption, and heterogeneity on rates of both personal and property victimization. Indeed, taken together, the three dimensions of community social disorganization mediate over one-half of the effects of Shaw and McKay's three structural factors (SES, mobility, heterogeneity) on the most general indicator of crime (i.e., total victimiza-

tion rate) in the predicted manner. And while family disruption has direct effects on every crime but vandalism, on average, one-third of its effects on victimization are transmitted by teenage peer groups.

Rates of Offending

Thus far we have examined rates of survey-reported victimization that are independent of the selection mechanisms of the criminal-justice system. We now turn to an alternative window that is also free of criminal-justice distortions in order to view the criminal process—estimates of the rate of offending in each area for common crimes against persons (e.g., fighting and assault) and property (e.g., vandalism and larceny) generated from self-reported survey data.

As shown in table 5, the pattern of relative effects provides support for the major hypothesis concerning variations in macro-level social control. Namely, the level of unsupervised peer groups has direct positive effects on rates of both violent (.17) and property (.16) offending. Moreover, none of the three exogenous factors in Shaw and McKay's original model (SES, heterogeneity, and residential stability) have significant ($P < .05$) direct effects on offending rates. Rather, as predicted by the theory, their effects are largely mediated by unsupervised teenage peer groups.[11] For example, of the total effect of SES on rates of personal violence and property theft/vandalism, a substantial portion (64% and 46%, respectively) is mediated by unsupervised teenage peer groups. Further, some 97% of the total effect of family disruption on violent offending is mediated by unsupervised peer groups. Note, however, that family disruption has the largest direct effect on involvement in property offending. Areas with cohesive family structures appear able to control crimes such as vandalism through means other than supervision of youth (e.g., increased guardianship of property).

Of the other two intervening factors, the density of local friendship networks has a significant negative effect on rates of property offending ($B = -.17$). The lack of an effect of organizational participation on either property or violent offending rates is somewhat surprising, given

[11] As noted earlier, the link between gang delinquency and adult criminal careers in socially disorganized areas was suggested by both Thrasher (1963) and Shaw and McKay (1942, 1969). Nonetheless, the effect of unsupervised teenage peer groups should be stronger on juvenile delinquency than on adult crime (Thrasher 1963, p. 281). This expectation appears supported by the data in that the indicator of unsupervised peer groups has stronger effects on victimization rates—which include a substantial proportion of offenses by juveniles—than on rates of self-reported offending by respondents, most of whom are adults.

TABLE 5

WLS Regression Estimates of the Effects of Community Structure and Social Disorganization on Self-reported Offending Rates in 238 British Local Communities (1982)

	OFFENDING RATES			
	Personal Violence		Property Theft/Vandalism	
	B	t-ratio	B	t-ratio
Socioeconomic status	−.03	−.40	.04	.54
Ethnic heterogeneity	.14	1.79*	−.10	−1.27
Residential stability	−.02	−.30	.10	1.24
Family disruption	−.00	−.08	.18	2.56**
Urbanization	−.00	−.11	−.10	−1.23
Local friendship networks	.02	.20	−.17	−2.26**
Unsupervised peer groups	.17	2.20**	.16	2.16**
Organizational participation	.01	.16	.08	1.27
R^2		.06[a]		.09[b]

[a] $P < .07$ for this value.
[b] $P < .01$ for this value.
* $P < .10$.
** $P < .05$.

its significant negative effect on victimization rates (tables 3 and 4). This suggests that well-organized communities (or communities with high mobilization capacities) may be effective in countering threats to personal safety by neighborhood victimization, but that such efforts do not necessarily reduce the propensity to offend among community residents. In this vein, note that offenders may be committing crimes outside the community.[12]

Consistency Tests and Verification

We performed a series of tests to detect possible influential observations, multicollinearity, and misspecification error. First, all regression models in tables 2–5 were examined for influential observations through inspection of residuals and the statistic Cook's D (see Cook and Weisberg 1982).

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[12] The lower overall explained variance in table 5, as opposed to tables 3 and 4, suggests that there may be more measurement error in self-reported offending rates than victimization rates. If true, this is probably due to greater unreliability in measuring offending than victimization and also to the overall infrequent nature of offending among adults in the BCS sample.

In all models, no one community in Great Britain had a disproportionate influence on the parameter estimates. In fact, the largest Cook's D value was .10, well below traditional levels of concern (typically 1.0). Second, we examined empirically the issue of multicollinearity. The correlations among independent variables were moderate—out of 28, only four were greater than .30, and, of these, the largest was .51. Variance-inflation factors were thus much below levels of concern (less than 2.0).

Third, we explored the possibility of whether our measure of unsupervised peer groups was confounded with age structure. It is possible that both high concentrations of unsupervised peer groups and high crime rates could be the result of there being many youths in the community. To assess this, we re-ran all models with a control for the proportion of households with juveniles. This control for age structure did not alter the major findings: the effect of unsupervised peer groups on rates of robbery, stranger violence, total victimization, burglary, auto theft, vandalism, self-reported (SR) violence and SR theft/vandalism was .36, .19, .33, .17, .26, .38, .15, and .16, respectively (cf. tables 3 and 4).

Fourth, we reestimated each regression model by (a) deleting insignificant predictors from tables 2–5 and (b) entering a new vector of four other potentially confounding characteristics. These included two traditional factors—percentage of unemployed and percentage of homeowners—and an alternative indicator of urbanization (building density). For the crime regressions, we also entered a variable tapping the "routine activity" patterns of community residents (Cohen and Felson 1979), defined as the mean number of nights spent outside the home for leisure activities. However, these new specifications did not change the major substantive results, thus increasing confidence in the validity and robustness of the original models.

Finally, it is possible that, in communities where crime rates are high, residents are afraid to venture outside their homes. In particular, fear of crime may inhibit the formation of local friendship groups and participation in community organizations (Skogan 1986; Sampson 1988). If this were true, it would confound the effects of friendship ties and organizational participation on crime with the consequences of fear of crime. To assess this, we re-ran the models and controlled for the extent to which residents felt unsafe walking in their neighborhoods at night. This is a strict test of the independent effects of theoretical measures because crime rates and fear overlap, both conceptually and empirically (.52). Nevertheless, the results were consistent with those presented above. It is important that the effects of local friendship networks and organizational participation on total victimization remained unchanged ($B = -.12$ and $-.11$, respectively; $P < .05$).

REPLICATION AND EXTERNAL VALIDATION

Despite the supportive empirical results thus far, there are two specific limitations to the 1982 BCS data that bear on major theoretical concerns. The first relates to the key indicator of unsupervised teenage peer groups. Recall that respondents were asked about groups of teenagers who made nuisances of themselves in the community. Although most of the victimization rates referred to quite serious crimes (e.g., robbery, stranger violence, burglary), it is nonetheless possible that respondents used these crimes as the criterion for defining nuisance behavior by teens. Were this the case, our measure of unsupervised peer groups may be in part definitionally confounded with crime itself.

The second issue pertains to the macro-level indicator of local friendship networks. Given that the survey question asked how many of the respondent's personal friends resided in the area (from none to all), a respondent with only one friend could be viewed as having strong local ties if his or her only friend lived in the community. On the other hand, those with an unusually large number of friends could be defined as having weak local ties even if they had several friends in the community. The question thus partly confounds variation in the number of friends each respondent has with their location.

While we do not believe that these two limitations pose a significant threat to the validity of findings, they do raise questions that merit empirical answers.[13] An answer is therefore provided through replication on a separate study that specifically addresses the two measurement issues— the second British Crime Survey. Conducted in 1984, the second BCS was not a follow-up but rather an independent nationally representative sample of 11,030 British residents. Approximately 37 randomly selected household respondents aged 16 and over were interviewed in each of 300 political constituencies of England and Wales, thus permitting the construction of macro-level measures in a fashion analogous to that in 1982.[14]

[13] We thank an anonymous *AJS* reviewer for raising these issues, spurring the idea of external validation.

[14] Within the 300 selected constituencies, further clustering of the sample was required, leading to the selection of two wards. The final sampling unit from which names and addresses were drawn was a polling district within each ward. In this design, there were only 18 interviews conducted in each polling district for the main questionnaire and 11 for the follow-up. With fewer than 20 respondents per area, community-level measures may be unreliable. Therefore, the decision was made to base the main replication on macro-level measures for the 300 political constituencies. Although larger than polling districts, the samples within constituencies are representative of the population and they are sufficient in number—the average number of completed main interviews per area is 37 (22 for follow-up). For complete details of the 1984 BCS design and interview format, see Hough and Mayhew (1985, app. B).

Despite similarities in design, the 1984 BCS is not as germane as the 1982 BCS for community-level analysis. First, political constituencies reflect ecological units that are much larger and more heterogeneous than those used for 1982. Second, because more areas were sampled, there are about 10 fewer respondents per area; consequently, aggregated community measures are less reliable. Third, the detailed activity question that served as the basis for our measure of organizational participation was not asked, and none of the relevant self-reported offending items (e.g., personal violence, theft, and vandalism) in the 1982 BCS were repeated. Accordingly, the 1984 BCS cannot be used to replicate the offending-rate results or the organizational-participation results, nor are the sampling units as valid as those from 1982 for approximating local communities.

Fortunately, however, the strengths of the 1984 BCS directly address the weaknesses in the 1982 BCS for our two main indicators of social disorganization. First, the wording of the peer-group question was changed to ask about "teenagers hanging around on the streets." No mention was made of nuisance behavior, and, unlike the 1982 BCS, the question specifically taps the dimension of group-oriented *street-corner* behavior. This is directly relevant to the ideas of both Shaw and McKay (1969) and Thrasher (1963) concerning teenagers "hanging out" on the street in groups. The new measure is defined as the proportion of residents who said that local street-corner teens were common.

Second, the friendship question was changed to restrict the respondent's universe of friends to the immediate area. Each resident was asked, "Thinking of the people who live in this area, how many would you regard as friends or acquaintances?" (ranging from none to most). Hence, instead of confounding the number of total friends, this question measures only the ties among local residents (e.g., a person with only one friend in the area would score low on this dimension). Note also that the question asks about acquaintances—thus merging friendships with the idea of density of acquaintanceship to form a more general measure tapping local associational ties and networks (see Freudenberg 1986). The community-level measure is defined as the proportion of residents who reported that most of the people in the area were either friends or acquaintances.

In short, the 1984 BCS allows us to replicate the fundamental portion of our social-disorganization model. Where the 1982 BCS is weak, the 1984 BCS is strong, and vice versa. Therefore, if the results converge in light of these divergent limitations, we will have strong empirical support for the theory in the form of external validation (see Selltiz, Wrightsman, and Cook 1976, p. 577).

1984 BCS Results

Table 6 presents the WLS regression model.[15] In panel A we observe that the exogenous community characteristics predict the endogenous dimensions of social disorganization in much the same manner as in 1982. For example, SES has a significant negative effect on teenage street-corner groups, while heterogeneity and, especially, family disruption have significant positive effects. The pattern of results for local informal networks is also congruent with that in 1982, in that the strongest predictor of the density of friendships/acquaintanceships is residential stability. In fact, the effect of residential stability (.32) is more than double that of any other variable. Panel A thus replicates on an independent sample our extended version of Shaw and McKay's model of the structural sources of community social disorganization.

Panel B of table 6 turns to the estimates of the full theoretical model. The primary question is whether the newly defined street-corner peer group and local network variables have the predicted effects on victimization rates. The answer is clear: the indicator of street-corner teenage peer groups has a significant effect on all four victimization rates. In fact, of all the variables in the model, the level of street-corner youth has by far the largest effect on vandalism and assault. In conjunction with the 1982 results, the large effect on vandalism underscores the connection between "hanging out" (Thrasher 1963) and delinquent acts. It thus appears that poor heterogeneous communities with pronounced family disruption foster street-corner teenage groups, which, in turn, leads to increased delinquency and ultimately to a pattern of adult crime.

The results for friendship networks are similarly supportive. The density of friendships/acquaintanceships has significant inverse effects on three out of four crimes, despite controls for six important community characteristics. It is particularly noteworthy that informal associational ties have the second largest effect on robbery. It seems that communities with sparse ties among friends and neighbors generate a weakened system of social control, which, in turn, facilitates predatory crime.

In brief, macro-level empirical analysis of the 1984 BCS replicates almost fully the theoretical picture painted in the 1982 BCS. Replication

[15] To achieve replication, we constructed indicators of SES, heterogeneity, residential stability, family disruption, and urbanization parallel to those in 1982. And while parallel self-reported offending rates were unavailable for analysis, we were able to construct four victimization rates similar to 1982—two personal (robbery and assault) and two property (burglary and vandalism). As in 1982, we included not only retrospective reports of victimization but, where possible, ratings of the crime problem in the local area (burglary, vandalism, and robbery). Also, parallel to 1982, the WLS regression models are weighted by the differential sample sizes across communities.

TABLE 6

WLS Regression Estimates for Replication of Social Disorganization Model on Independent Validation Sample: 300 British Constituencies (1984)

A. Social Disorganization

	Street-Corner Peer Groups		Density of Friendship/ Acquaintanceship	
	B	t-ratio	B	t-ratio
Socioeconomic status	−.17	−3.02**	−.13	−2.49**
Ethnic heterogeneity	.11	1.82*	−.15	−2.64**
Residential stability	.07	1.18	.32	5.98**
Family disruption	.19	3.21**	−.09	−1.68*
Urbanization	.09	1.44	−.14	−2.31**
R^{2a}	.12		.24	

B. Victimization Rates

	Property						Personal					
	Burglary		Vandalism		Robbery		Assault	
	B	t-ratio	B	t-ratio	B	t-ratio	B	t-ratio
Socioeconomic status	.14	2.60**	−.16	−2.87**	.06	1.23	−.00	−.11
Ethnic heterogeneity	.02	.42	.00	.04	.34	6.49**	.14	2.23**
Residential stability	.02	.29	.03	.57	.06	1.07	−.08	−1.40
Family disruption	.11	1.91*	.04	.68	.12	2.40**	.10	1.68*
Urbanization	.27	4.55**	−.05	−.76	.15	2.73**	.02	.35
Street-corner peer groups	.17	3.01**	.35	6.26**	.13	2.65**	.23	4.01**
Density of friendship/acquaintanceship	−.15	−2.61**	−.09	−1.43	−.20	−3.62**	−.10	−1.65*
R^{2a}	.24		.19		.37		.16	

[a] $P < .01$ for these values.
* $P < .10$.
** $P < .05$.

in this case is especially compelling because of the differing nature of limitations associated with each survey.[16] Our confidence is therefore increased that the indicators of unsupervised peer groups and local friendship networks in *both* surveys are tapping important and distinct dimensions of community levels of social disorganization.

CONCLUSIONS

Relying on recent insights from social-network theory and a macro-level conceptualization of family structure and crime, we have presented evidence from two large national surveys of England and Wales that replicate and significantly extend Shaw and McKay's systemic model of community social disorganization. Specifically, our empirical analysis established that communities characterized by sparse friendship networks, unsupervised teenage peer groups, and low organizational participation had disproportionately high rates of crime and delinquency. Moreover, variations in these dimensions of community social disorganization were shown to mediate in large part the effects of community structural characteristics (i.e., low socioeconomic status, residential mobility, ethnic heterogeneity, and family disruption) in the manner predicted by our theoretical model. We have thus demonstrated that social-disorganization theory has vitality and renewed relevance for explaining macro-level variations in crime rates (see also Bursik 1984, 1986). In particular, the fact that Shaw and McKay's model explains crime and delinquency rates in a culture other than the United States (cf. Clinard and Abbott 1976, p. 201) is testimony to its power and generalizability (see Kohn 1987).

Nevertheless, our analysis does not constitute a definitive test of social-disorganization theory. First, the proportion of variance explained in crime and delinquency was, at times, quite modest. Second, only three dimensions of community organization were examined, and these were, of necessity, measured with single items. In this regard, note that while local friendship networks, organizational participation, and control of teenage peer groups are all dimensions of a systemic concept of social

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[16] Further analysis revealed that the major findings in table 6 were not affected by influential observations, multicollinearity, or alternative model specifications. And as a final check on the results, we repeated the entire 1984 BCS analysis on equivalent measures constructed for each of 599 polling districts. The results showed that the proportion of variance explained was generally lower for the polling districts, most likely because of increased measurement error associated with the smaller sample sizes used to construct aggregate measures (see n. 14). However, the structural-parameter estimates were almost equivalent. In particular, the direct effect of the major theoretical variable—street-corner peer groups—was .12, .34, .16, and .23 (all $P < .01$) on rates of burglary, vandalism, robbery, and assault, respectively (cf. table 6). These convergent results solidify the substantive conclusions based on the 1984 data.

organization, they are conceptually distinct and hence not different measures of the same variable. Consequently, we were unable to model measurement error with unobservable-variable methods. Third, the organizational-participation variable was imprecise—for example, we do not know which organizations respondents were involved with, and in fact we cannot guarantee that they were located in the community. Finally, better measures of both friendship networks (see, e.g., Fischer 1982; Freudenberg 1986) and street-corner gangs (see, e.g., Short and Strodtbeck 1965) are needed at the community level.

But despite these limitations, the overall empirical results were theoretically consistent and robust for a variety of model specifications. Indeed, 12 different victimization and offending rates were analyzed across a large number of local communities (238, 300, and 599) for two independent samples at different time periods, all with convergent results. And most important, we believe that the ability to measure dimensions of social disorganization at the community level represents an essential first step in directly testing macrosocial control theory. Without such empirical identification of mediating links, the theory is open to charges that it is conceptually redundant with crime itself and, what is perhaps more crucial, that traditional ecological studies are compatible with almost any theoretical speculation. We therefore hope that future research will improve on the present effort by directing attention toward more precise measures of the salient dimensions of community social disorganization.

REFERENCES

Alwin, Duane, and Robert Hauser. 1981. "The Decomposition of Effects in Path Analysis." Pp. 123–40 in *Linear Models in Social Research,* edited by Peter Marsden. Beverly Hills: Sage.
Blau, Peter. 1977. *Inequality and Heterogeneity.* New York: Free Press.
Bordua, David. 1961. "Delinquent Subcultures: Sociological Interpretations of Gang Delinquency." *Annals of the American Academy of Political and Social Science* 338:119–36.
Bursik, Robert J., Jr. 1984. "Ecological Theories of Crime and Delinquency since Shaw and McKay." Paper presented at the annual meetings of the American Society of Criminology, Cincinnati.
———. 1986. "Ecological Stability and the Dynamics of Delinquency." Pp. 35–66 in *Communities and Crime,* edited by A. J. Reiss, Jr., and M. Tonry. Chicago: University of Chicago Press.
Bursik, Robert J., Jr., and Jim Webb. 1982. "Community Change and Patterns of Delinquency." *American Journal of Sociology* 88:24–42.
Byrne, James, and Robert J. Sampson. 1986. "Key Issues in the Social Ecology of Crime." Pp. 1–22 in *The Social Ecology of Crime,* edited by James Byrne and Robert J. Sampson. New York: Springer-Verlag.
Clinard, Marshall, and Daniel Abbott. 1976. "Community Organization and Property Crime: A Comparative Study of Social Control in the Slums of an African City."

Pp. 186–206 in *Delinquency, Crime, and Society,* edited by James F. Short, Jr. Chicago: University of Chicago Press.

Cohen, Lawrence, and Marcus Felson. 1979. "Social Change and Crime Rate Trends: A Routine Activities Approach." *American Sociological Review* 44:588–607

Cook, Dennis, and Sanford Weisberg. 1982. "Criticism and Influence Analysis in Regression." Pp. 313–61 in *Sociological Methodology,* edited by S. Leinhardt. San Francisco: Jossey-Bass.

Decker, David, David Shichor, and Robert O'Brien. 1982. *Urban Structure and Victimization.* Lexington, Mass.: Heath.

Elliott, Delbert, and Suzanne Ageton. 1980. "Reconciling Race and Class Differences in Self-reported and Official Estimates of Delinquency." *American Sociological Review* 45:95–110.

Fischer, Claude. 1982. *To Dwell among Friends: Personal Networks in Town and City.* Chicago: University of Chicago Press.

Flanagan, Timothy, and Maureen McLeod, eds. 1983. *Sourcebook of Criminal Justice Statistics—1982.* Washington, D.C.: Government Printing Office.

Freudenberg, William. 1986. "The Density of Acquaintanceship: An Overlooked Variable in Community Research?" *American Journal of Sociology* 92:27–63.

Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78:1360–80.

Hagan, John, A. R. Gillis, and Janet Chan. 1978. "Explaining Official Delinquency: A Spatial Study of Class, Conflict, and Control." *Sociological Quarterly* 19:386–98.

Hanushek, Eric, and John Jackson. 1977. *Statistical Methods for Social Scientists.* New York: Academic.

Heitgerd, Janet L., and Robert J. Bursik, Jr. 1987. "Extracommunity Dynamics and the Ecology of Delinquency." *American Journal of Sociology* 92:775–87.

Hindelang, Michael, Travis Hirschi, and Joseph Weis. 1981. *Measuring Delinquency.* Beverly Hills: Sage.

Hough, Mike, and Pat Mayhew. 1983. *The British Crime Survey: First Report.* London: Her Majesty's Stationery Office.

———. 1985. *Taking Account of Crime: Key Findings from the Second British Crime Survey.* Home Office Research Report no. 85. London: Her Majesty's Stationery Office.

Hunter, Albert. 1974. *Symbolic Communities: The Persistence and Change of Chicago's Local Communities.* Chicago: University of Chicago Press.

Janowitz, Morris. 1975. "Sociological Theory and Social Control." *American Journal of Sociology* 81:82–108.

Kapsis, Robert. 1976. "Continuities in Delinquency and Riot Patterns in Black Residential Areas." *Social Problems* 23:567–80.

Kasarda, John, and Morris Janowitz. 1974. "Community Attachment in Mass Society." *American Sociological Review* 39:328–39.

Kohn, Melvin. 1987. "Cross-National Research as an Analytic Strategy." *American Sociological Review* 52:713–31.

Kornhauser, Ruth. 1978. *Social Sources of Delinquency.* Chicago: University of Chicago Press.

Krohn, Marvin. 1986. "The Web of Conformity: A Network Approach to the Explanation of Delinquent Behavior." *Social Problems* 33:81–93.

Maccoby, Eleanor, Joseph Johnson, and Russell Church. 1958. "Community Integration and the Social Control of Juvenile Delinquency." *Journal of Social Issues* 14:38–51.

Morris, T. 1970. Review of *Juvenile Delinquency and Urban Areas,* 2d ed., by Clifford Shaw and Henry McKay. *British Journal of Criminology* 10:194–96.

Office of Population Censuses and Surveys. 1984. *Census, 1981: Key Statistics for Local Authorities, Great Britain.* London: Her Majesty's Stationery Office.

Reiss, Albert J., Jr. 1986a. "Why Are Communities Important in Understanding Crime?" Pp. 1–33 in *Communities and Crime,* edited by A. J. Reiss, Jr., and M. Tonry. Chicago: University of Chicago Press.

———. 1986b. "Co-Offender Influences on Criminal Careers." Pp. 121–60 in *Criminal Careers and "Career Criminals,"* edited by Alfred Blumstein, Jacqueline Cohen, Jeffrey Roth, and Christy Visher. Washington, D.C.: National Academy.

Sampson, Robert J. 1985. "Neighborhood and Crime: The Structural Determinants of Personal Victimization." *Journal of Research in Crime and Delinquency* 22:7–40.

———. 1986. "Effects of Socioeconomic Context on Official Reaction to Juvenile Delinquency." *American Sociological Review* 51:876–85.

———. 1987. "Urban Black Violence: The Effect of Male Joblessness and Family Disruption." *American Journal of Sociology* 93:348–82.

———. 1988. "Local Friendship Ties and Community Attachment in Mass Society: A Multilevel Systemic Model." *American Sociological Review* 53:766–79.

Selltiz, Claire, Lawrence Wrightsman, and Stuart Cook. 1976. *Research Methods in Social Relations,* 3d ed. New York: Holt, Rinehart & Winston.

Shaw, Clifford, and Henry McKay. 1942. *Juvenile Delinquency and Urban Areas.* Chicago: University of Chicago Press.

———. 1969. *Juvenile Delinquency and Urban Areas,* rev. ed. Chicago: University of Chicago Press.

Shaw, Clifford, Frederick Zorbaugh, Henry McKay, and Leonard Cottrell. 1929. *Delinquency Areas.* Chicago: University of Chicago Press.

Short, James F., Jr. 1963. "Introduction to the Abridged Edition." Pp. xv–liii in *The Gang: A Study of 1,313 Gangs in Chicago,* by Frederic Thrasher. Chicago: University of Chicago Press.

———. 1969. "Introduction to the Revised Edition." Pp. xxv–liv in *Juvenile Delinquency and Urban Areas,* by Clifford Shaw and Henry McKay. Chicago: University of Chicago Press.

Short, James F., and Fred Strodtbeck. 1965. *Group Process and Gang Delinquency.* Chicago: University of Chicago Press.

Simcha-Fagan, Ora, and Joseph Schwartz. 1986. "Neighborhood and Delinquency: An Assessment of Contextual Effects." *Criminology* 24:667–703.

Skogan, Wesley. 1986. "Fear of Crime and Neighborhood Change." Pp. 203–29 in *Communities and Crime,* edited by A. J. Reiss, Jr., and M. Tonry. Chicago: University of Chicago Press.

Smith, Douglas R. 1986. "The Neighborhood Context of Police Behavior." Pp. 313–41 in *Communities and Crime,* edited by A. J. Reiss, Jr., and M. Tonry. Chicago: University of Chicago Press.

Suttles, Gerald. 1968. *The Social Order of the Slum.* Chicago: University of Chicago Press.

Thomas, W. I., and F. Znaniecki. 1920. *The Polish Peasant in Europe and America,* vol. 4. Boston: Gorham.

Thrasher, Frederic. 1963. *The Gang: A Study of 1,313 Gangs in Chicago,* rev. ed. Chicago: University of Chicago Press.

Tomeh, Aida. 1973. "Formal Voluntary Organizations: Participation, Correlates, and Interrelationships." *Sociological Inquiry* 43:89–121.