

## **Neighborhood Responses to Disorder and Local Attachments: The Systemic Model of Attachment, Social Disorganization, and Neighborhood Use Value<sup>1</sup>**

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*This paper investigates neighborhood-level connections between ecological structure, responses to disorder, and local attachment and social involvement. We develop predictions integrating the systemic model of community attachment, neighborhood use value, and the social disorganization perspective. The systemic model predicts neighborhood stability will deepen attachment and local involvement; the social disorganization perspective anticipates effects of stability on responses to disorder; and neighborhood use value suggests effects of status, racial composition, and problems such as crime and deterioration on attachment. We further propose, building on earlier work, that attachment may influence responses to disorder, or vice versa. Data include resident surveys, census information, on-site assessments, and crime rates from 66 randomly selected Baltimore, Maryland, neighborhoods. In support, respectively, of the systemic and neighborhood use value models, we find strong impacts of stability and class on neighborhood attachment/involvement. Neighborhood fear and perceived informal social control depend upon emotional investment and social integration. We see no overall impacts of deterioration on responses to disorder, calling into question some key aspects of the incivilities thesis. Earlier investigations of deterioration and responses to disorder that excluded person-place transactions may have been misspecified. Results underscore the strong relationship between person-environment transactions and responses to disorder. Asking how to encourage citizens to resist disorder is questioning, in part, how to increase the bonds residents have with the locale and with one another.*

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**KEY WORDS:** attachment to place; responses to disorder; neighborhood use value; systemic model; fear of crime; community crime prevention.

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## INTRODUCTION

Some neighborhoods have residents who are attached to where they live and socially involved with nearby others; residents who are involved in local affairs, know many of the people on their block, value their community and the sense of community it provides. By contrast, some neighborhoods have residents who go their own way, do not know their neighbors or local improvement association, and view their neighborhood not as a home, but just a place to live.

Neighborhoods also can differ in how their residents respond to disorder in their community. In some neighborhoods residents may feel confident another resident would intervene with noisy teens on the street late at night, and may not express concern about walking alone in their neighborhood. In other locales, however, residents may doubt whether their neighbors would act when confronted with rowdy behavior, and may restrict their behavior because of safety concerns. The central questions we address in this paper are the following: How do these two features of neighborhood life—responses to disorder, and attachment and local involvement—interrelate? How are they influenced by neighborhood conditions?

We begin by reviewing the most relevant work on attachment to place, and models explaining variations in local sentiment in urban settings, focusing most attention on the systemic model of community attachment and the concept of neighborhood use value. We also mention work on local social involvement. Next we examine responses to disorder. How they have been classified, and what connections have emerged between these responses and neighborhood conditions, local sentiment, and involvement? Using perspectives from both areas of research we propose a model linking neighborhood conditions, responses to disorder, and attachment and local involvement.

### ATTACHMENT TO PLACE, THE SYSTEMIC MODEL OF COMMUNITY ATTACHMENT, AND THE NEIGHBORHOOD USE MODEL

#### Attachment Defined

Attachment to place refers to a recognized positive connection between an individual or group and their locale (Shumaker and Taylor, 1983). Attachment benefits from and contributes to a sense of community, feeling that other residents are similar in important ways, and share similar values. It has social, cognitive, and emotional components (Gerson *et al.*, 1977). Further, people can be attached to locales of varying extent: their dwelling, their community, and their region, for example (Cuba and Hummon, 1993).

Factors, such as social class, which might promote attachment to one domain, like the house, may not promote attachment to another domain, like the neighborhood (Gerson *et al.*, 1977). Attachment can be modeled at different levels: the individual, the streetblock, or the neighborhood, for example (Shumaker and Taylor, 1983).

### The Systemic Model of Attachment

The systemic model views local community as "a complex system of friendship and kinship networks and formal and informal associational ties rooted in family life and ongoing socialization processes. At the same time it is fashioned by the large-scale institution of mass society, whose form, content, and effectiveness vary widely and whose defects and disarticulations reflect the social problems of the contemporary period" (Kasarda and Janowitz, 1974:329; see also Hunter, 1974). According to this model (a) sense of community and local attachment will be highly variable across locations (b) individuals with stronger local social ties will have deeper sentiments of attachment, and (c) more intense local problems interfere with sentiments of attachment. On this last point, the model implies that severe local problems dampen local attachment, and may lead people to leave their community. People may live in a community of limited liability (Janowitz, 1951), involved and participating extensively in the locale, but "prepared to leave . . . if local conditions fail to satisfy their immediate needs or aspirations" (Kasarda and Janowitz, 1974:329).

Several studies provide strong support for the systemic model of community attachment. Kasarda and Janowitz (1974) found that length of residence, but not density or urban location, consistently influenced several aspects of attachment to place. "The systemic model focuses on length of residence as the key exogenous factor influencing community behavior and attitudes" (Kasarda and Janowitz, 1974:330). Living in a neighborhood with highly mobile residents generally makes it more difficult for neighbors to get acquainted with one another (Deutschberger, 1946) and get involved in common local groups or initiatives. By contrast (Greer, 1962:113), stability will encourage local social interaction. Similar residents' lives intersect often in a stable neighborhood, bonding them to one another and their neighborhood. In a more stable locale, such ties, once established, further strengthen attachment (Kasarda and Janowitz, 1974:330; see also Chavis and Wandersman, 1990; McMillan and Chavis, 1986).

Other studies replicate Kasarda and Janowitz by also linking attachment to length of residence or indicators of neighborhood stability. For example, Hunter (1974), in a Chicago study, found that length of residence was posi-

tively associated with attachment to only the local area (129), and was the strongest predictor of knowing the name of the local community (96).

Sampson (1988, 1992) investigated neighborhood-level connections between local social ties and attachment using aggregated results from the British Crime Surveys. In the more recent study he showed that residential stability permitted the growth of local social ties, leading in turn to social cohesion, and subsequently to local attachment. He used a question about neighborhood satisfaction, a concept related to but distinct from the concept of attachment, as his indicator for attachment.

Hummon (1990:25), reviewing recent work on attachment, argues similarly. Numerous case studies and histories of urban neighborhoods in Boston (Gans, 1962; Von Hoffman, 1994), Chicago (Jablonsky, 1993), and New York (Ware, 1935) also relate local social climate, and sometimes ethnic identity (Rivlin, 1982), with attachment. But these other results diverge from Kasarda and Janowitz's findings in two ways: by suggesting that other exogenous conditions, beyond stability, may be important determinants of attachment or involvement; or by failing to link stability to attachment or involvement.

Some contradictory findings on length of residence include the following. Crenson (1983:209) found involvement in local organizations, a behavioral correlate of attachment, more likely among longer term residents surveyed in 21 Baltimore neighborhoods. But a Baltimore study of 63 street blocks, after controlling for race and class, failed to find effects of length of residence on a cognitive indicator of attachment, knowing the neighborhood name (Taylor *et al.*, 1984a). If we aggregate the systemic model of attachment to the community level, more stable neighborhoods should have residents more confident in their neighborhood future. Hackler and his colleagues, examining Edmonton tracts, found stronger social ties but not more neighborhood confidence, in more stable tracts (Hackler *et al.*, 1974).

Turning to race and class, we see discrepancies as well. Gerson *et al.* (1977) saw neither effects of social class nor of race on attachment in a national sample. Hunter (1974), in the same Chicago study noted above, did not observe race and class effects on attachment. But consider the following. Crenson (1983) in the above-mentioned Baltimore study, did find effects of race and class on attachment. Fewer residents provided a name for their neighborhood in lower income neighborhoods, and in more predominantly African-American neighborhoods. The same relationship was observed among street blocks (Taylor *et al.*, 1984a). Hackler found neighborhood confidence stronger in higher status tracts in Edmonton.

In sum, support for the systemic model's predicted effects of stability on attachment has not emerged consistently. Further, other studies sometimes find additional ecological correlates, with comparable strength, such as race or status, but, again, fail to do so consistently. "The literature deal-

ing with the impact of class and race upon people's orientations to their local communities presents an ambiguous, if not contradictory, picture" (Hunter, 1974:103).

But why should these other ecological factors be relevant to attachment? Logan and Molotch's concept of neighborhood use value provides an explanation.

### Neighborhood Use Value

Neighborhoods provide residents with a range of use values (Logan and Molotch, 1987:1, 120). These use values arise because the neighborhood serves as a focus for the daily round, may contain significant sources of social support (Warren, 1977; Wellman and Leighton, 1979), provides some degree of relative safety (Taylor and Brower, 1985), and represents a symbol contributing to personal and social identity (Hunter, 1974; McKenzie, 1921; Rivlin, 1982).

All else equal, higher status neighborhoods are more likely to provide their residents with higher use value, which may result in more "intense place identification" (Logan and Molotch, 1987:102). Crime is lower there (Harries, 1980), house values are higher (Gerson *et al.*, 1977). Both factors may increase resident satisfaction (Guest and Lee, 1983). Therefore residents living in higher status neighborhoods should be more attached to locale.

Turning to race, more predominantly African-American neighborhoods, all else equal, are more likely to be disadvantaged in amenities (Hunter, 1974:136; McDougall, 1993). For example, physical deterioration is more widespread in more predominantly African-American neighborhoods, and such deterioration cannot be attributed simply to the rapid ecological change that some of these neighborhoods may have undergone (Taylor and Covington, 1993). Deterioration, and other problems resulting from differential enforcement or distribution patterns across urban communities, may lower neighborhood use value for residents.<sup>3</sup>

### Implications for Modeling Attachment at the Neighborhood Level

The systemic model predicts stability of neighborhood context should be the best predictor of local attachment; in transient neighborhoods it is

<sup>3</sup>This relationship does *not* imply an iron-clad linkage between race and class. In urban areas, middle-class, predominantly African-American neighborhoods as well as lower income predominantly African-American neighborhoods can be found. This holds true in our current study site of Baltimore. But as African-American authors themselves have argued (McDougall, 1993), historic patterns of segregation have resulted in far fewer urban middle class locations for African Americans than for members of other ethnic groups.

difficult for residents to get to know one another; in more stable contexts the concomitant formal and informal local ties foster stronger attachments. Stability provides an important setting condition for the emergence of ties, and subsequent development of cohesion and attachment (Sampson, 1992).

Contrasting this emphasis on stability, a focus on neighborhood use value suggests that class of neighborhood context should have the strongest effects on attachment. Differential distributions of many amenities and services follow class, and perhaps racial, lines (McDougall, 1993). Therefore attachment should be weaker in lower class neighborhoods, where neighborhood use value is, all else equal, lower for residents.

In the present study we investigate two other features of neighborhood context: physical deterioration, and neighborhood crime rates. Both the systemic model and the neighborhood use value model predict these features will dampen attachment. The systemic model, and the related idea of community of limited liability, both suggest such burdens reduce attachment by increasing residents' desire to leave, "despite participation in the social fabric of the community" (Kasarda and Janowitz, 1974:335). Along slightly different lines, Logan and Molotch (1987:110) suggest such problems simply reduce the overall value of the neighborhood for residents, resulting in less attachment and more alienation from the locale, but not necessarily a desire to leave. Therefore they both predict dampening effects of crime or deterioration on attachment, but for slightly different reasons.

Recent work by Skogan (1990) provides some support for expected impacts of crime-related problems on residents. His neighborhood-level analysis of several dozen neighborhoods over several cities found perceptions of social and physical disorders influenced attachment, controlling for effects of race, stability, and class (Skogan, 1990:70 ff.). He also observed significant effects of perceived disorder on a combined satisfaction-attachment index, and on intent to move.<sup>4</sup> These results would appear to support the contentions of the neighborhood use theorists. But caution is in order since between-city effects were not separated from between-neighborhood effects; results were based on respondents' perceived ratings of problems, not on-site assessments; and the perceived disorder index correlated very closely with neighborhood structure ( $r = .84$  between unemployment and perceived incivilities; Skogan, 1990:173).

<sup>4</sup>The latter effect dependent on which neighborhoods were included in the analysis.

## RESPONSES TO DISORDER

What roles may responses to disorder play in linking neighborhood structure and attachment? These responses, for different reasons, are not addressed by the systemic model, or the neighborhood use value model.

Crime and related problems of disorder represent serious threats to urban neighborhood viability (Bursik and Grasmick, 1993). Crime rates, delinquency rates, and lesser "disorders" such as vandalism, abandoned stores, or graffiti, may influence how people view their neighborhood, and pathways of neighborhood change (Bursik, 1986; Perkins *et al.*, 1993).

Social disorganization theorists have suggested that some neighborhoods actively counter disorder through widespread informal social control. In other neighborhoods, however, residents are "socially disorganized," and unable to work collectively toward realizing common goals and common values (Bursik, 1988; Kornhauser, 1978). Below we detail the types of responses to disorder investigated. But first we consider why these responses to disorder were ignored by the attachment models discussed above.

### Why Ignored?

The systemic model of attachment ignores responses to disorder for three reasons. First, it strives to be a general theory of attachment. It is not concerned with specific domains such as housing, crime, and so on.

Second, it assumes that residents, in part because we live in a highly mobile society, are willing to change neighborhoods if one community does develop problems. "Specific undesirable conditions" may make a person "wish to leave" (Kasarda and Janowitz, 1974:335). But people may not be relatively free to move. The choice constraint model of mobility suggests the range of realistic alternative locations is severely limited for many (Fischer, 1977). Given this limitation, many people may choose to take action, rather than move, when faced with undesirable conditions. Given social psychological work on effort justification (Hollander, 1971), such improvement efforts may lead to stronger attachment.

Third, the neighborhood use value model suggests local problems emerging in a neighborhood, like crime, are dwarfed by the broader scale social forces. Local disorder, and residents' responses to it, when considered

in the context of other exogenous and better organized “forces,” represent minimal influences on neighborhood viability.<sup>5</sup>

Such slighting aside, crime and related problems may reduce people’s enjoyment of their neighborhood, and increase local concern. We might expect that in higher class neighborhoods, where residents experience more functional but not necessarily socioemotional benefits from their neighborhood, residents would respond more vigorously to crime and related problems.

## Types of Responses to Disorder

### *Informal Social Control vs. Social Disorganization*

Informal social control refers to the willingness of residents to intervene or otherwise take care of disorder-related problems, in a personal or group context (Bursik, 1988; Hackler *et al.*, 1974; Maccoby *et al.*, 1958). Social disorganization theorists expect neighborhood stability to be the best ecological predictor of informal social control (McKenzie, 1921). In Shaw and McKay’s (1972) original formulation developed prior to World War II, areas close to the central business district housed ethnically heterogeneous and mobile populations. The turnover and heterogeneity made it difficult to form local groups, decreasing residents’ ability to informally control events, and increasing the likelihood that the area would be socially disorganized (Bursik, 1988). Social disorganization refers to “the inability of local communities to realize the common values of their residents or solve commonly experienced problems” (Bursik, 1988:521). Social disorganization was a property of communities, not individuals, and would give rise to—but was not synonymous with—higher offense, delinquency, and offender rates.

The social disorganization model has been expanded to address altered urban dynamics and the rise of urban planning following World War II (e.g., Bursik, 1989), to incorporate extraneighborhood dynamics (e.g., Bursik and Grasmick, 1993), and to include impacts of rapid neighborhood change over time (e.g., Taylor and Covington, 1988).

As the model has become more differentiated, questions have arisen regarding the relative importance of ethnic homogeneity vs. stability in promoting local order. In a community-level test of the model using aggregated British Crime Survey data, Sampson and Grove (1989) found ethnic het-

<sup>5</sup>“Certainly, we do not consider the unpredictability of outsiders from another gang or turf as the critical threat (cf. Suttles, 1968) [to neighborhood] . . . For us the major challenge to neighborhood, as a demographic-physical construct as well as a viable social network, comes from organizations and institutions” (Logan and Molotch, 1987:111).

erogeneity linked to problems with unsupervised teen groups, problems presumably arising from a lack of informal social control. These troubles, in turn, were linked to victimization and offender rates. But Jablonsky's urban history of the Back of the Yards neighborhood in Chicago suggests that stability can promote informal control, on the street and in public places like playgrounds, even in an ethnically diverse setting (Jablonsky, 1993:80, 115). Unfortunately, studies do not consistently connect stability to informal control. Hackler *et al.* (1974) found no overall connection between neighborhood stability and willingness to intervene.

In sum, the social disorganization perspective stresses that neighborhood stability will have a stronger influence on informal social control than other aspects of neighborhood context (McKenzie, 1921). This proposal has received some support. Questions also have arisen regarding the relative independent impacts of stability vs. ethnic heterogeneity.

Another response to disorder investigated across neighborhoods is fear of crime, or people's tendencies to restrict their behaviors. At the neighborhood level, we can envision fear or behavioral restriction as the "flip side" of informal social control and organizational efforts to counter disorder. Whereas the latter represent efforts to *resist* disorder, concerns for personal safety represent a recognition of or an *accommodation* to the threat of disorder.

### *Classifying Responses to Disorder*

Researchers have proposed a number of ways to classify responses to disorder. One typical approach (DuBow *et al.*, 1979) cross-classifies responses to disorder as collective vs. individual, and cognitive vs. behavioral. Collective cognitive responses include shared expectations that neighbors will respond speedily and aggressively to minor annoyances, such as vandalism or loud noise late at night, or to more serious matters such as attempted breakins. Individual responses, in addition to fear of crime, include avoiding dangerous places in the neighborhood, restricting one's activity at night because of concerns about safety, or taking steps to protect one's property. Various studies find different numbers and types of dimensions for individual responses to disorder, e.g., Lavrakas and Lewis (1980) vs. Lab (1990).

### *Fear of Crime*

Numerous studies have investigated fear of crime. (For a recent review see LaGrange and Ferraro, 1992.) Of most relevance here are the findings linking fear with other responses to disorder, and with the immediate social

and physical environment. Studies connect higher fear levels with increased behavioral restriction—people are less willing to go out, or to go out alone, or to go out at certain times (Liska *et al.*, 1988). The connection varies by age group, and is presumed to be stronger for women (Gordon and Riger, 1979). Studies consistently join weaker local social ties (Taylor *et al.*, 1984b) or greater distrust of neighbors (Fischer, 1982:246) with stronger concerns for personal safety. People perceiving a more deteriorated residential environment (Skogan, 1990), or living in a setting assessed as more deteriorated (Covington and Taylor, 1991), feel more vulnerable.

### **Proposed Neighborhood Level Classification of Responses to Disorder**

To conceptualize neighborhood-level responses to disorder we draw on an earlier suggestion by Furstenberg (1972). He proposed organizing citizen-based, individual-level responses to disorder into two classes: avoidance and mobilization. “Avoidance refers to staying at home, locking doors, and keeping away from strangers and threatening places. Mobilization includes direct actions designed to protect property, such as using alarms, lights, guns or other physical devices” (Lab 1990:470).

#### *Accommodation*

We translate the concept of avoidance into the more general notion of accommodation. Residents who have accommodated to disorder have concerns about their personal safety, avoid dangerous places, are reluctant to go out at night, or reluctant to go out alone at night. They recognize a possible threat, and adjust their perceptions and behavioral routines accordingly. Neighborhoods where residents are afraid will be neighborhoods where residents restrict their activities more (Liska *et al.*, 1988; Riger and Gordon, 1978).

#### *Resistance*

At the neighborhood level, residents’ expectations of neighbors who will respond directly to local disorder (Hackler *et al.*, 1974; Maccoby *et al.*, 1958) may be one of the most central features of local informal social control. It appears linked to participation in broader, organized crime prevention efforts (Skogan, 1990:135). A neighborhood where residents do *not* widely expect their neighbors to act in the face of minor problems is socially disorganized (Bursik, 1988).

In short, at the neighborhood level, accommodation and resistance may relate inversely. Perceptions of vulnerability will be associated with reports of restricted behavior, and both of these may relate negatively to collective expectations of a willingness to intervene.

### **What Features of Neighborhood Context Will Shape Responses to Disorder?**

Human ecological theory suggests that neighborhood stability will have the strongest impact on resistance vs. accommodation to disorder (Bursik, 1988; McKenzie, 1921). In addition to stability, recent work on fear of crime and other responses to disorder suggests that resistance vs. accommodation will be influenced by neighborhood racial composition, neighborhood class, and perceived or actual disorderly conditions (Bursik and Grasmick, 1993; Skogan, 1990:193-194; Taylor *et al.*, 1985).

### **Connecting Local Social Involvement, Attachment, and Responses to Disorder**

Stability, and the accompanying increased social legibility, should enhance not only attachment (Sampson, 1992), but also efforts to resist crime and related problems. Stronger local ties facilitate residents' efforts to oversee nearby outdoor locations in the neighborhood (Taylor *et al.*, 1981). Stability strengthens the local social climate, in turn enhancing efforts to counter disorder and dampening feelings of personal vulnerability.

But researchers also have suggested a different causal ordering, where concerns for personal safety weaken local social ties. Fischer (1982:246) argues fear affects local friendships. Similarly, Sampson (1992) treats fear as an exogenous variable. So researchers have differed on whether responses to disorder, such as fear, follow from or precede local social dynamics.

Similarly, for attachment and responses to disorder, we have rationales for two alternate causal orderings. Several studies suggest residents less attached to their neighborhood or more concerned about their neighborhood's future also will be more fearful (Baba and Austin, 1989; Taylor and Hale, 1984, 1986). The rationale is that higher levels of attachment and a concomitant sense of community block the emergence of concerns for personal safety, while concerns about neighborhood quality or the neighborhood future deepen feelings of vulnerability. At the neighborhood level we expect locations with more attached residents will show, consequently, more resistance to disorder, and less accommodation.

But, again, researchers also have argued the opposite ordering. Hackler *et al.* (1974:341) proposed that if residents are willing to resist disorder generally, this shared expectation will bolster their confidence in and attachment to the neighborhood. Expectations of vigilant neighbors deepen local sentiments. Widely shared feelings of insecurity and vulnerability may erode those same sentiments. Additional theoretical grounding for this ordering comes from two sources. Experiments on social psychological theories of effort justification (Hollander, 1971) find participants value more highly outcomes for which they have expended more effort. Extrapolating to expectations: if neighbors are willing to protect the neighborhood, it must be worth defending. In addition, prevention theorists argue that organized crime prevention efforts can build community, involvement, and attachment (Lewis *et al.*, 1988; Rosenbaum, 1988). The argument may be extended to other, nonorganized responses to disorder. Residents who think neighbors are willing to intervene in minor incidents may end up caring more about their community.

### STATEMENT OF INTEGRATED MODEL

Integrating the systemic model of attachment, human ecological work on social disorganization, and work on responses to disorder suggests a comprehensive model for understanding responses to disorder at the neighborhood level. Its predictions include the following.

The *systemic model of attachment* predicts effects of neighborhood stability on neighborhood attachment and social involvement. At the neighborhood level attachment and local social climate may correlate very strongly (Sampson, 1992), suggesting a broader construct we label *attached and involved*. The systemic model expects stability to be more important than other structural aspects such as ethnic composition and class.

The strongest prediction derived from the *neighborhood use model* is that class will influence attachment. Higher class neighborhoods, receiving better goods and services from city agencies, or advocating more effectively for their needs, should have residents who are more attached because their neighborhoods are more functional.

Further, although the neighborhood use model slights the crime issue per se, it would admit that neighborhood problems, like crime and deterioration, detract from the quality of the neighborhood if they are severe. So crime and deterioration, if sufficiently separate from class, and distractingly high, may have a separate negative impact on attachment.

The neighborhood use model also suggests neighborhood racial composition might influence attachment. If, in predominantly African-American neighborhoods, housing quality, city services, and other amenities are in-

adequate *beyond* what would be expected given the status level of those residents, the use model would predict a separate effect of racial composition on attachment. But given historical patterns of segregation, and housing disadvantages experienced in many predominantly African-American neighborhoods in large, older cities (McDougall, 1993), it may not be possible to observe separate effects for racial composition.<sup>6</sup>

The strongest prediction derived from the *social disorganization* literature is that neighborhood stability will affect responses to disorder. In more stable neighborhoods residents may be more willing to intervene in minor incidents, or have fewer concerns about personal security (Maccoby *et al.*, 1958). How this process works depends upon which literature we emphasize. Work on responses to disorder has often modeled neighborhood stability as having a direct effect on responses to disorder, or an indirect effect via its impacts on perceived local disorder (Skogan, 1990:70 ff.). By contrast the more "classical" ecological school (see especially McKenzie, 1921) would emphasize an indirect impact via the effects of stability on local acquaintanceship. In more stable neighborhoods residents know one another better; consequently they rely more on others to deal with minor problems, and express fewer security-related worries because the environment is more predictable. Such a pathway also agrees closely with an extended systemic model of attachment (Sampson, 1992).

The *responses to disorder* literature suggests direct effects of class, race, stability, crime, and related problems like physical deterioration on responses to disorder. Skogan's work (1990) intimates that, of these predictors, deterioration may have the strongest impact.

We have two predictions regarding the relationship between attachment and involvement, and responses to disorder. The systemic model, and an ecological perspective say the first causes the second. But the second might also cause the first, as argued by social psychological effort justification theory, and some crime prevention theorists.

## METHODS

### Sample

In 1981, 66 Baltimore city neighborhoods were randomly sampled from the city's 200-plus ecologically defined neighborhoods (Goodman and

<sup>6</sup>We are also limited in our ability to address this question by the sample of neighborhoods used. Although middle-class predominantly African-American neighborhoods did exist in the study site at the time of our project, only a very small number of these were actually included in our sample.

Taylor, 1983; Taylor *et al.*, 1979). On-site raters coded physical conditions on 20% of all street blocks in selected neighborhoods in the summer of 1981. (For details on assessment procedures, and reliability of measures, see Taylor *et al.*, 1985.) In 1982 we selected a random sample of streetblocks in each neighborhood, listed current households with telephones, and drew a systematic sample of households across the blocks in a neighborhood. Treating each neighborhood as a stratum, we sought to obtain 25 completed interviews per neighborhood. We obtained 1622 completed interviews. Randomly selecting a household head or spouse of household head within each sampled household, interviewers completed a 30 minute interview either by phone or in person. A mixed field/phone strategy was used, completing the survey by phone where possible. (For more details on field and sampling procedures, and more extensive justification of the mixed contact approach, see Covington and Taylor, 1991.) The overall response rate was 73%.

The respondent group had the following characteristics: 34% men and 66% women; median 1981 income between \$20,000 and \$25,000; and a median education level of 12th grade. Forty-seven percent of the sample identified themselves as African American, 46% as white, .5% as other, and 17% refused to report racial identity. Across neighborhoods, survey samples matched neighborhood populations as described in the 1980 census.<sup>7</sup>

The 66 neighborhoods included an extremely broad array of setting conditions. Racial composition ranged from 100% African American to 100% white (median = 33% African American); poverty rates ranged from 1 to 50% (median = 12) and unemployment rates ranged from 0 to 32% (median = 9). Percentage of owner occupied housing units ranged from 6 to 89% (median = 55), and adults completing high school ranged from 13 to 41% (median = 26).

The sex ratio of our sample, 2:1 women:men, is typical for urban probability samples, and closely matches the sex ratios obtained in other urban samples, e.g., Stafford and Galle (1984). We reweighted the sample to reflect the city 1990 sex ratio of men to women, and the relative population

<sup>7</sup>The correlation between the racial composition of the survey samples, and the racial makeup of each neighborhood, was extremely high ( $r = .95$ ,  $\mu_2$  a coefficient reflecting monotonicity, was .989).

Proportion of owner occupied households taps ecological stability. The correlation between the census and the interviewed samples on the proportion of owner occupied households was very substantial ( $r = .58$ ,  $\mu_2 = .77$ ).

We used education as a measure of status, since a substantial proportion of the sample refuse to answer the income question ( $n = 315$ ). The correlation between the percentage of respondents with a high school degree or better, and the percentage of the adult population with a high school degree or better, was substantial ( $r = .32$ ;  $R = .40$  accounting for curvilinear relationship;  $\mu_2 = .46$ ). Given that the census figure used adult population whereas our number used one respondent per household, this figure suggests substantial validity.

size of each neighborhood in our sample. Throughout, we use results for the weighted sample.

### Measures

Table I provides detailed information on the measures used. For ecological measures tapping racial makeup (RACECOMB) and stability (STABIL) we combined survey and census measures to create indexes. To capture status we used average education level at the neighborhood level (EDUC). Thus, we have measures tapping each of the three factorial ecology dimensions. To measure crime we used average crime rates over a three-year period (CRIM7880). To measure physical deterioration we used a principal component score based on on-site observations of on-block conditions in each neighborhood.

Items assessing attachment included direct measures—"How attached do you feel to your neighborhood?"—as well as one of the most oft-used items—"Do you feel that you are part of the neighborhood or that it's just a place to live?" We also included items reflecting aspects of person-place bonds closely related to attachment such as sense of community (McMillan and Chavis, 1986), neighborhood satisfaction, and territorial cognitions reflecting responsibility (Taylor, 1988).

Measures of local social involvement included presence of friends in the neighborhood, acquaintances on the block, social neighboring, and involvement with neighbors to help one another.

Measures reflecting responses to disorder included items suggesting resistance to disorder, as well as items reflecting fear of crime and behavioral restriction. Respondents indicated if they thought their neighbors would directly intervene with loud teens late at night, or with vandals spray painting a building.

### Modeling Strategy<sup>8</sup>

Before moving to neighborhood-level modeling, we used individual-level data to define a measurement model, and to choose a causal relationship between attachment and responses to disorder.

With the individual-level data we constructed first order latent factors—corresponding to *attachment*, *social involvement*, *vigilance*, and *fear and behavioral restriction*. For each latent construct we used one observed vari-

<sup>8</sup>Details of the modeling strategy, and detailed results for models with different reference variables and different sets of predictors, are available upon request from the author.

Table I. Measures<sup>a</sup>

Concept (Variable Name)	Reliability (Cronbach's Alpha)	Variables
Neighborhood structure and conditions		
Neighborhood stability (STABIL)	.80	1. Percent owner occupied housing units, z scored, from census 2. Percent respondents who are homeowners, z scored, from survey 3. Percent married couple households, z scored, from survey 4. Average length of residence in the neighborhood, z scored, from survey
Neighborhood racial composition (RACEOMB)	.975	1. Percent African American households, z scored, from census 2. Percent African American households, z scored, from survey
Neighborhood status (EDUC)	.63	Average years of education, from survey
Physical deterioration (DECAYNU)	.87	Principal component scores, based on on-site assessments, capturing incidence of physical deterioration
Neighborhood crime rate (CRIM7880)	.90	Average 1978-1980 reported neighborhood crime rate per 100,000 population was z scored for the following: murder, robbery, assaults, residential burglary, and rape. Each of the five z scores were then added
Attachment-involvement Attachment to place (ATTACH)		
		(Q6) All things considered, how satisfied or dissatisfied are you with this neighborhood as a place to live? (Q14) Do you feel that you are part of the neighborhood, or that it's just a place to live? (Q15) How much do you feel a sense of community with other people in your neighborhood? That is, how much do you share their interests and concerns? (Q17) As a member of your neighborhood, how responsible do you feel for things that happen around the corner off your block? (Q18) How attached do you feel to your neighborhood?

Social involvement  
(INVOLVED)

- (Q8A) Do you have any friends who are not relatives living in your neighborhood?
- (Q23A) Do you know about the (NAME OF NEIGHBORHOOD IMPROVEMENT ORGANIZATION)?
- (Q28A) Have you kept watch on a house or apartment while a neighbor was away, or has a neighbor done this for you?
- (Q28B) Have you arranged with other people in the neighborhood to have newspapers or mail brought in while you or they were away?
- (Q28C) Have you given another person in your neighborhood your key, or have they given you theirs, so that animals could be fed, plants watered, or the house checked on while you or they were away?
- (Q47) On your block, how many people do you know by face or name?  
Please tell me whether in the past year you have:
- (Q48B) Visited inside a neighbor's house on your block?
- (Q48D) Borrowed tools or household items from a neighbor on your block?

Responses to disorder  
Willingness to Intervene  
(Vigilant)

- (Q52A) Suppose some kids were spray painting a building on your street. Do you think any of your neighbors would tell them to stop?
- (Q54A) Suppose some teenagers around 15 or 16 years old were shouting and making a loud disturbance on your street around 11:00 at night. Do you think any of your neighbors would tell them to stop?  
I'd like to ask you what kinds of things you or someone in your house *has* done to protect you, your household, or your property.
- (Q58D) Are people in your house less willing to go out at night than they used to be?
- (Q58E) Do people in your home go out alone less frequently than they used to?
- (Q29) How safe would you feel being out alone in your neighborhood *during the day*?
- (Q30) How safe would you feel being out alone in your neighborhood *at night*?
- (Q32A) Are there any specific places in your neighborhood that many people try and avoid because they think these places might be dangerous?

Fear of Crime—  
Avoidance (FEAR)

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<sup>a</sup>For education we estimated reliability as follows. Respondents in each neighborhood were separated randomly into two halves, and aggregated to the neighborhood level. Cronbach's alpha between the neighborhood scores based on these two random halves was then calculated.

able as a reference variable (Joreskog and Sorbom, 1988:85). We verified that each observed variable had a significant coefficient in the hypothesized direction linking it with the first order factor. We defined each first order factor as emerging from one of two second order latent factors—*attached and involved* or *responses to disorder*, and examined the coefficients linking the first- to second-order factors, and the relationship between these second-order constructs.<sup>9</sup>

We next examined different causal relationships between indicators of *attached and involved* and indicators of *responses to disorder*. The causal relationship selected was the one modeled at the neighborhood level.

Using observed composites suggested by the first-order factors at the individual level, aggregating the data to the neighborhood level, and defining *attached and involved* and *responses to disorder* as first-order latent factors at the neighborhood level, we examined impacts of neighborhood structure, crime, and physical deterioration on these two factors.

## RESULTS

### Convergent Validity

The validity coefficients for each of the variables related to the four first order factors appear in Table II. We split the data into two random halves (Hayduk, 1987), and show results for both random halves of the data. The coefficients, for all variables, agreed quite closely across the two random halves. All the coefficients were sizable, significant (all  $t$  values  $> 2$ ), and in the hypothesized direction. The coefficients suggest that we have successfully defined the four first-order factors of attachment, involved, vigilant, and fear and restriction.

### More General Factors: Attached and Involved; Resistance vs. Accommodation

Results further confirmed that these four first order factors related to two more general second-order factors. The more general second order construct attached and involved had significant impacts on both attachment ( $\gamma = .58, t = 14.18, p < .001$ , for first random half;  $\gamma = .50, t = 10.20, p < .001$ , for second random half) and involved ( $\gamma = .54, t = 13.50, p < .001$ , for first random half;  $\gamma = .82, t = 12.49, p < .001$ , for second random

<sup>9</sup>I am grateful to an anonymous reviewer for suggesting the use of a second-order factor analysis here.

Table II. Convergent Validity: Validity Coefficients for First-Order Factors<sup>a</sup>

Variable	First-Order Construct			
	Attached	Involved	Vigilant	Fear-Restrict
(Q6) Neighborhood satisfaction	.53 (0.03)			
	.42 (0.03)			
(Q14) Feel part of neighborhood	1 — 1 —			
(Q15) Sense of community	.73 (0.02)			
	.69 (0.03)			
(Q17) Territorial cognition	.31 (0.03)			
	.33 (0.03)			
(Q18) How attached?	.64 (0.03)			
	.71 (.02)			
(Q8A) Friends in neighborhood		.40 (0.04)		
		.55 (0.03)		
(Q23A) Know of organization		.23 (0.03)		
		.26 (0.03)		
(Q28A) Watch neighbor's house		.85 (0.02)		
		.78 (0.02)		
(Q28B) Arrange take mail		1 — 1 —		
(Q28C) Exchange keys		.76 (0.02)		
		.71 (0.02)		
(Q47) Know on block		.40 (0.03)		
		.36 (0.03)		
(Q48B) Visit inside with neighbor		.50 (0.03)		
		.45 (0.03)		

Table II. Continued.

Variable	First-Order Construct			Fear-Restrict
	Attached	Involved	Vigilant	
(Q48D) Borrow from neighbor		.47 (0.03)		
		.43 (0.03)		
(Q52A) Neighbor stops graffiti			1 — 1 —	
(Q54A) Neighbor stops noisy teens			.46 (0.03)	
			.39 (0.03)	
(Q32A) Dangerous places to avoid				.23 (0.03)
				.16 (0.03)
(Q29) Fear during day				.70 (0.03)
				.69 (0.03)
(Q30) Fear at night				1 — 1 —
(Q58D) Go out at night less				.54 (0.03)
				.51 (0.03)
				.51 (0.03)
(Q58E) Go out alone less				.43 (0.03)
				.42 (0.03)

<sup>a</sup>Four lines for each variable show coefficient for first random half, standard error in parentheses, followed by coefficient for second random half and its standard error. All  $t$  values significant at  $p < .001$ . Weighted  $n = 810$  for each random half. Variables defined as instruments for each factor assigned loading of 1 and 0 error variance.

half). These results reinforce earlier findings that attachment and local social involvement relate closely to one another.

In keeping with our suggestion of a more general dimension of resistance vs. accommodation in responses to disorder, we find both vigilance and fear and restriction emerging from the modeled construct;  $\gamma = 1$  ( $t =$

40.25,  $p < .001$ ) in both samples for vigilance.<sup>10</sup> Fear and restriction yielded substantial negative coefficients in both samples ( $\gamma = -.38$ ,  $t = -11.37$ ,  $p < .001$ , in first random half;  $\gamma = -.22$ ,  $t = -6.39$ ,  $p < .001$ , for second random half). Thus, as hypothesized, those less confident that their neighbors would intervene to manage a disorderly situation are more fearful, and restrict their behavior more. These significant validity coefficients for this second general factor suggest that resistance and accommodation are, to some extent, opposite sides of the same coin.

Finally, as expected, those more attached and involved also were more likely to resist disorder and less likely to accommodate to it ( $\phi = .89$ ,  $t = 22.72$ ,  $p < .001$ , in first random half;  $\phi = .43$ ,  $t = 10.11$ ,  $p < .001$ , in the second random half).

### Causal Relationship Between Responses to Disorder, and Attachment and Involvement

As noted earlier, researchers have argued that attachment and local involvement influence responses to disorder, as well as the reverse. Although it was not possible to investigate directly a possible bidirectional relationship between the second-order factors, we could investigate a possible bidirectional relationship between pairs of first-order factors that come from different second-order factors. Choosing attachment to represent attached and involved, and vigilance to represent responses to disorder, we found that the impact of attachment on vigilance was significant ( $\beta = .78$ ,  $t = 2.15$ ,  $p < .05$ ), whereas the impact of vigilance on attachment was not ( $\beta = -.51$ ,  $t < 1$ ).<sup>11</sup> Therefore we retained the impact of attached and involved on responses to disorder and used it in our neighborhood level models. This finding supports researchers arguing that closer bonds between residents and their neighborhood encourage efforts to counter disorderly behavior, and lessen chances residents will withdraw from streetlife or have safety concerns while abroad in the neighborhood.

### Neighborhood Models

Converting the first-order factors into observed indexes, and aggregating weighted data to the neighborhood level, we investigated determi-

<sup>10</sup>The loading of 1 resulted because we set the error variance of vigilance equal to 0. Freeing this resulted in different but substantively similar  $\gamma$  coefficients.

<sup>11</sup>This result replicated when we used fear and restriction rather than vigilance to represent responses to disorder. It also replicated on the second random half of the data, and replicated if we used a polychoric-polyserial matrix rather than a variance-covariance matrix.

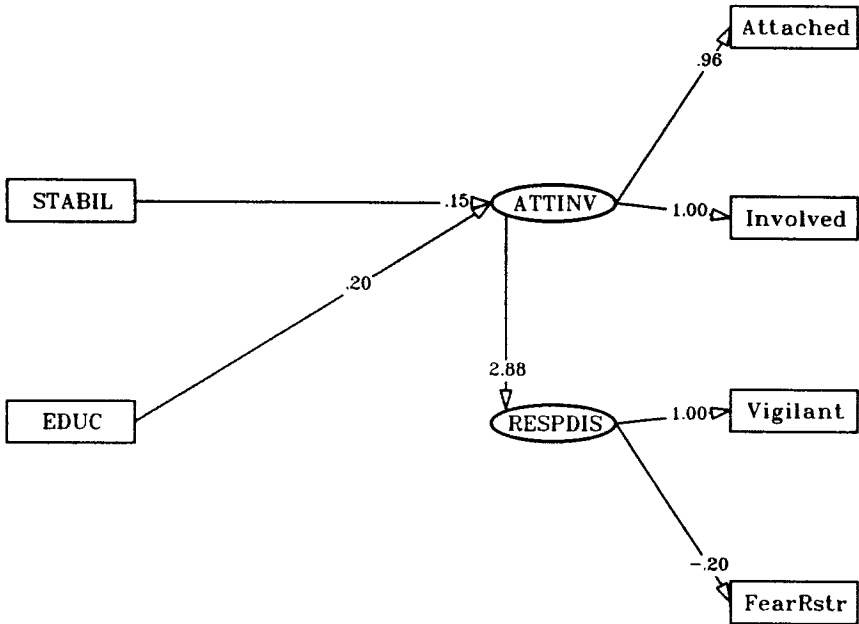


Fig. 1. Effects of stability and education: LISREL estimates.

nants of attached and involved and responses to disorder, defining each of the latter as a latent construct. These analyses control for error in the predictor variables, and the outcome variables. Analyses were repeated using different combinations of reference variables for the two endogenous constructs (details available upon request).

### *Stability and Education*

Stability and education had the clearest, most consistent impacts on attachment and responses to disorder. Regardless of the specific combinations used as reference variables for the endogenous constructs, stability and education had significant impacts on attached and involved. In all these models, attachment retained its significant impact on responses to disorder.

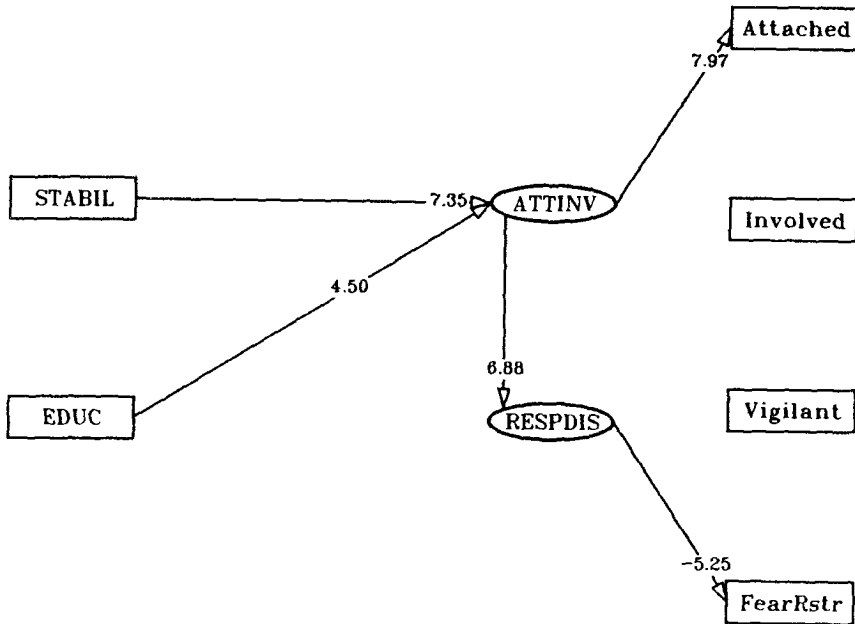


Fig. 2. Effects of stability and education: *t* values.

All four models, for the different combinations of reference variables, fit the sample matrix or came quite close to fitting it.<sup>12</sup>

Figure 1 shows the results when we use involved as the reference variable for attached and involved and vigilant as the reference variable for responses to disorder. The model shown provides good fit with the sample matrix [ $\chi^2(9) = 12.62, p = .18$ , Goodness of Fit Index (GFI) = .94, Adjusted Goodness of Fit Index (AGFI) = .86]. Figure 2 shows the corresponding *t* values.

As predicted by the systemic model of attachment, in more stable neighborhoods residents feel closer to the community, and to one another, controlling for effects of education. Stability, however, does not have separate, independent effects on responses to disorder.

<sup>12</sup>The fit of the model to the sample matrix was influenced only slightly by the choice of reference variables, ranging from a very good fit, as shown here, to  $p = .049$  for the  $\chi^2$  with fear and attached as the reference variables. In three out of the four instances the  $\chi^2$  was nonsignificant.

Rather, stability influences how residents react to crime and related problems indirectly, via its impact on attachment and involvement (indirect effect = .43,  $t = 5.67$ ,  $p < .001$ ). This effect is possible because local involvement retains its significant impact on responses to disorder ( $\beta = 2.88$ ,  $t = 6.88$ ,  $p < .001$ ), even after controlling for effects of stability and education on attached and involved.

Similarly, education influences only attached and involved, and does not directly shape how people respond to disorder. In line with predictions from the neighborhood use value concept, residents in higher class neighborhoods report more commitment to locale and more involvement with other residents, presumably because they receive better city services and experience better neighborhood conditions. Furthermore, given the impact of attachment on reactions to crime and related problems, education has a significant impact on these reactions (indirect effect = .57,  $t = 4.01$ ,  $p < .001$ ). In neighborhoods with more educated residents, fear is lower, and vigilance is higher.

Overall, results suggest stability was a more important predictor than education. The standardized direct effect of stability on attached and involved was slightly larger than the standardized direct effect of education (.78 vs. .53), and the standardized total effect of stability on responses to disorder also was noticeably larger (.63 vs. .43).

### *Race*

Neighborhood racial composition did not show independent impacts on attached and involved or responses to disorder.<sup>13</sup>

### *Adding Crime*

Crime and our incivilities index correlated strongly with one another and thus competed to explain the outcome variables. Therefore it was necessary to enter them in separate models.

The results with *crime* depended in part on choice of reference variables. In two out of the four models crime had a significant *positive* impact on attached and involved. Controlling for stability and education, neighborhoods with higher crime had more attached, involved residents. In two out of the four models crime also had a significant direct impact on responses

<sup>13</sup>Nonsignificant effects surfaced if we allowed race to influence only one of the endogenous constructs at a time, or if we allowed it to influence both of them. The lack of impact on attached and involved arose in part from how we defined that construct, forcing a positive relationship between attachment and involvement.

to disorder, elevating fear and restriction, and dampening vigilance. Focusing on  $\chi^2$ , the fit of the model to the data was either marginally acceptable or marginally unacceptable, depending on the choice of reference variables.

The addition of crime did not substantially alter the impacts of stability and education on the outcomes, or the impact of local involvement on responses to disorder.

*Adding Deterioration*

Models including deterioration showed a consistent impact of deterioration on attached and involved that was not influenced by the choice of reference variables. All models showed acceptable fit. The only substantive feature of the model affected by the choice of the reference variables was the direct impact of deterioration on responses to disorder. This was significant in three of the four models. All models retained significant impacts of stability and education on attached and involved, and significant impacts of attached and involved on responses to disorder. Figure 3 shows

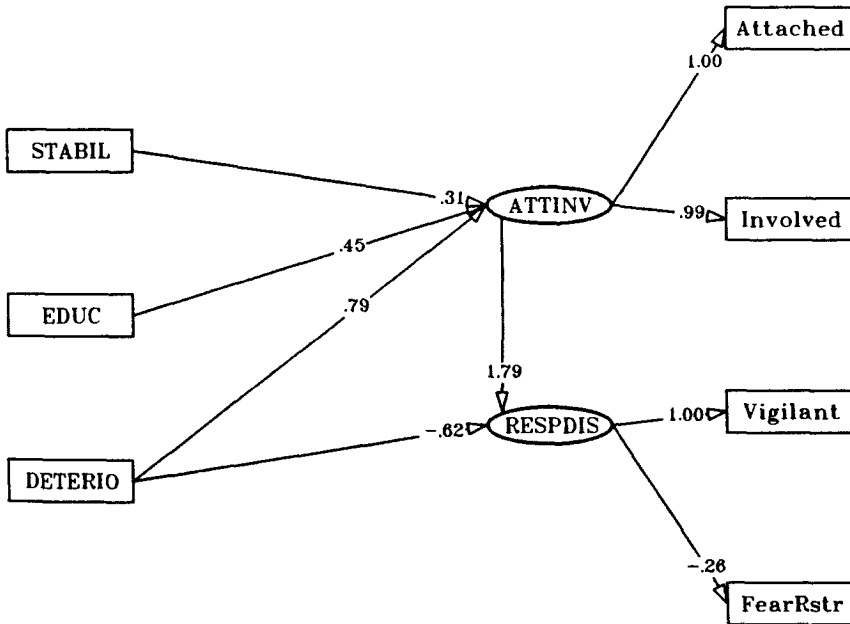


Fig. 3. Education, stability, and deterioration: LISREL estimates.

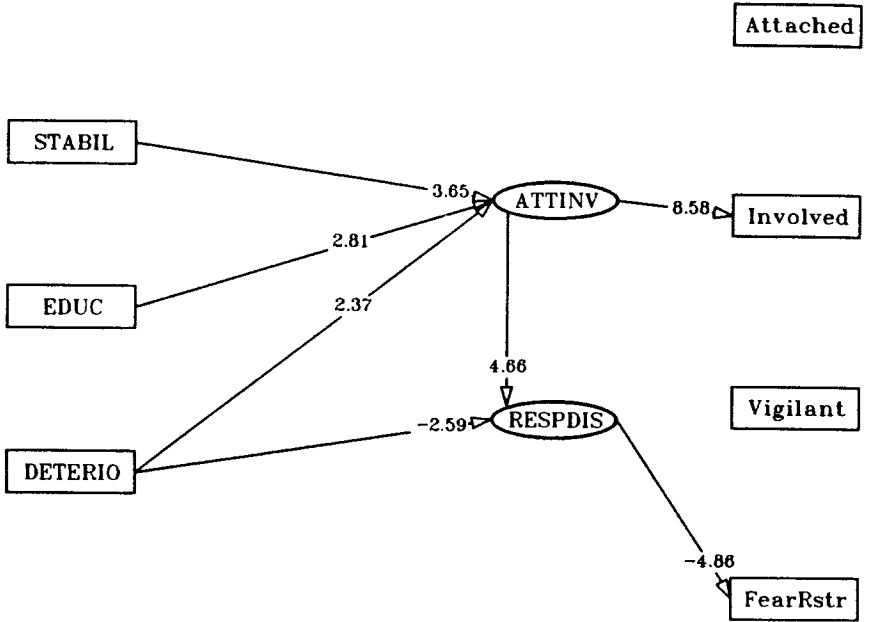


Fig. 4. Education, stability, and deterioration:  $t$  values.

the unstandardized coefficients for the model using vigilance and attached as the reference variables ( $\chi^2 [9] = 10.48, p = .31$ ; GFI = .96; AGFI = .87). Figure 4 shows the corresponding  $t$  values.

As did crime, deterioration had a bivalent impact on responses to disorder. Controlling for the other predictors, neighborhoods experiencing more deterioration had *more* invested and involved residents ( $\gamma = .79, t = 2.37, p < .05$ ). At the same time, as predicted by the neighborhood use concept and work on fear of crime and physical deterioration, deterioration is associated with residents who are less willing to intervene if they see a problem, who are more concerned about their safety, and who restrict their behavior more ( $\gamma = -.62, t = -2.59, p < .05$ ). Although the indirect effect on responses to disorder ( $1.42, t = 2.15, p < .05$ ) is larger than the direct effect, the total effect “washes out” ( $.80, t = 1.09, ns$ ). There is no overall effect of deterioration on how residents respond to disorder.

The addition of the incivilities measure does not change the relative impacts of stability and education; standardized total effects suggest that stability continued to have a slightly greater impact on responses to disorder than class (.80 vs. .60).

The question naturally arises: is the positive effect of deterioration on involved and attachment a result of committing the partialling fallacy (Gordon, 1968)? Using ordinary least squares (OLS) regression we looked carefully at a number of diagnostics to address this possibility, and also reran (OLS) regressions eliminating two high education–high deterioration neighborhoods. These assessments did not reveal marked problems in our analyses specific to the coefficients for deterioration, although there was some suggestion of a slight tendency toward an ill conditioned matrix of predictors. Results excluding two high education–high deterioration neighborhoods were substantively similar to those reported here. It is probably appropriate to interpret the results of the models that include deterioration with some caution.

In sum, the neighborhood level results clearly show consistent impacts, in the expected directions, of stability and education on local involvement, attachment, and responses to disorder. Impacts on responses to disorder are mediated by impacts of attachment and involvement on those responses. Models including deterioration, although they need to be interpreted with caution, suggest deterioration had no net effect on responses to disorder.

## DISCUSSION

### Stability and Class

Results underscore the importance of neighborhood stability as a key setting condition for neighborhood viability. Stability, as we have seen in prior studies on the systemic model of attachment, helps turn coresidents into reliable neighbors, known acquaintances, and perhaps even friends. More stable neighborhoods have residents who care more about their community. But in addition, and going beyond earlier studies, the work here suggests that because stability enhances neighbors' knowing one another and caring about their neighborhood, it also makes them feel less vulnerable to crime and related problems. The systemic model of attachment predicted effects of stability on caring and local social ties. The social disorganization perspective predicted effects of stability on willingness to intervene, and concerns about safety. Combining these two perspectives we observed effects of stability on responses to disorder via impacts of stability on social and person–place bonds.

Controlling for stability, and as predicted by the concept of neighborhood use value, neighborhoods whose residents reported more education also reported stronger attachment and more social involvement. This effect

persisted after we control for crime or physical deterioration, suggesting that other positive features of these higher class neighborhoods, separate from their levels of crime and related problems, and independent of the stability of context, bonded residents more strongly to one another, and to their locale. Delivery of urban services unrelated to disorder, or stronger resident homogeneity on values or lifestyles, may be responsible.

### **Relative Importance of Stability and Class**

Results suggested stability was more important than class in shaping responses to disorder. This is in keeping with long-standing suggestions from human ecologists. It also agrees closely with recent analyses of resident responses to disorder in Minneapolis–St. Paul (Taylor, 1995).

If, generally, stability is a more important determinant of responses to disorder than other aspects of neighborhood structure, it would have implications for urban policymakers seeking to enhance resident-based responsiveness to crime related problems. Policymakers might more profitably pursue neighborhood stabilization rather than neighborhood upgrading. Stabilization programs in a low income neighborhood might focus on city-assisted rehabilitation of vacant housing and subsequent subsidized leasing to nearby low-income residents. By contrast, an upgrading program might focus on selling vacant housing to professionals at very attractive prices, and helping new residents finance the rehabilitation. In the second instance the resulting neighborhood social fabric includes longer term as well as newer residents. In the first instance the resulting neighborhood includes a higher proportion of longer term residents.

Of course, urban community redevelopment policies need to be considered in the context of other goals beyond enhancing resident responsiveness to disorder. Policy development and implementation will balance these competing goals, some of which may not enhance community informal social control.

### **Local Bonds Relate to Responses to Disorder**

Our findings that stability and class have only indirect impacts on responses to disorder, via their impacts on attachment and involvement, argue for researchers devoting more theoretical attention to the connections between these local bonds and residents' responsiveness to crime and related problems. It suggests viewing these reactions as part of a larger constellation of local sentiments and acquaintances.

DuBow and Podolefsky (1982) reached similar conclusions in a study focusing on organized, collective responses to crime, such as participation in group-sponsored, anticrime initiatives. Examining qualitative and survey data gathered in the late 1970s from over a dozen neighborhoods in several cities, they concluded that anti-crime participation emerged from participation in local community groups, and the latter emerged from community stability. Like theirs, our findings "indicate a need to rethink conventional strategies aimed to stimulate local community anticrime efforts" (314). We extend their findings by suggesting the importance of stability and social climate, not just to organized collective responses, but also to cognitive, behavioral, and emotional responses to disorder.

Local improvement organizations in many initiatives already take these setting conditions into account, focusing on community development first. Their logic is that helping residents become more knowledgeable about one another will lead to stronger responsiveness to disorder (Chavis and Wandersman, 1990). Although there are limitations to such a strategy, particularly in extremely high crime-high fear neighborhoods where residents may deeply distrust one another, the strategy argues for a closer understanding of the community psychology and environmental psychology underpinning residents' responsiveness to disorder.

### **Impacts of Crime and Deterioration**

Work on responses to disorder, but not the neighborhood use model, predicted effects of crime and/or physical deterioration on responses to disorder. Although results varied somewhat depending on the reference variables used, we observed the expected direct effects of crime or deterioration on these responses. Fear and restriction were higher, and willingness to intervene were lower, in higher crime neighborhoods or neighborhoods with more severe deterioration.

These direct effects, however, did not tell us the whole story. These direct impacts, appearing in three out of four neighborhood level models, were counterbalanced by significant indirect impacts, opposite the expected direction, on attached and involved. Taken together, the counterbalancing indirect and direct impacts of crime or deterioration on responses to disorder resulted in nonsignificant total effects. As best we could determine, the impacts of crime or deterioration on attached and involved opposite the expected direction were not a function of data or analytic problems. It does not appear to be an historical artifact, emerging from some partially gentrified neighborhoods in the sample.

These findings, although unexpected, are not completely at variance with work in the area. Crenson (1983:120) observed a positive relationship between attachment and perceptions of incivilities, and between attachment and perceptions of crime. Recent analyses of assessed deterioration and resident responses to disorder in Minneapolis–St. Paul (Taylor, 1995) similarly found no effects of deterioration on the outcomes after controlling for neighborhood structure. Our finding of no overall systematic impacts of deterioration on responses to disorder echoes Miethe's recent summary regarding incivilities and individual-level fear of crime (Miethe, 1995:21): "[T]he empirical evidence on the direct and indirect impact of measures of neighborhood incivilities on individual's fear of crime is inconclusive." The same statement appears appropriate for neighborhood fear levels.

We cautiously suggest two implications from this pattern of findings. First, actual deterioration, and actual crime problems, controlling for class and stability in a locale, may, *in some neighborhoods*, draw residents together, providing an external threat to combat, at the same time that they deepen feelings of vulnerability. In contrast to the conventional wisdom that crime or related problems atomize community (Conklin, 1975), they may mobilize community. There are probably several factors, beyond the disorder level itself, such as residents' views about the source of crime or deterioration, determining if such a response emerges (Podolefsky, 1983). We need to know more about the community and perhaps historical conditions shaping these responses. When examining individual responses to disorder in an explicitly spatial framework, Taylor and Brower (1985) suggested three possible responses: retreat, bulwarking, and expansion. In a collective and less spatially explicit way, the same types of responses may be occurring among neighborhood residents.

Second, previous studies examining effects of physical deterioration or signs of incivility on responses to disorder, and ignoring impacts on local social climate and person–place bonds, may have captured only a portion of their causal impact. When their total causal impacts on responses to disorder are examined, the direct and indirect effects cancel out one another. Looking at impacts of assessed incivilities while excluding the roles played by mediating person–place bonds may represent mis-specified models.

## CONCLUSION

Incorporating insights from the systemic model of community attachment, the concept of neighborhood use value, and the social disorganization perspective, we test an integrated, neighborhood-level model of responses to disorder and local attachment. We find that neighborhood stability and

class deepen residents' attachment to their locale and their involvement with neighbors. These community dynamics in turn influence residents' feelings of vulnerability, actions taken to reduce exposure to risk, and perceived willingness to intervene in disorderly events. Results confirm the neighborhood use model, and the systemic model of attachment, extending both to show how neighborhood structure, by means of its effects on local sentiment and social life, influences residents' responses to crime and related problems. Crime and physical deterioration demonstrate bivalent direct and indirect impacts on responses to disorder. It is not certain at this point that neighborhood crime and neighborhood physical deterioration make independent contributions to residents' responses to disorder.

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