

# Chapter 14.

## Neighborhood and Adolescent Mental Health: Structure and Experience\*

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"... a city is not an arrangement of roads, buildings, and spaces,  
it is society in action."  
L. March, 1981, p. 202

*An individual's mental health is influenced strongly by the actions of people who inhabit his or her social world. Nowhere is this truth more apparent than with regard to the mental health of children and adolescents. For example, the vast literature linking parenting behavior to child development and emotional well-being attests to the power of social interactions, especially those entailing primary relationships. This theme is echoed in the literature on peer relations during adolescence. In general, developmental psychopathology has emphasized proximal social relationships, such as family and friends. Other adolescent outcomes, including early childbearing, educational attainment, and involvement in crime, have been linked to the structural characteristics of neighborhoods, i.e. aggregate socioeconomic and demographic characteristics of the population (for a review, see Jencks & Mayer, 1990), suggesting that the mental health of young people may also be affected by more distal social contexts. This chapter explores the impact of neighborhood on young people's mental health.*

*The discussion is organized into three sections. The first describes concepts of neighborhood, reviewing theories and research that link neighborhood to adolescent outcomes such as early childbearing, juvenile delinquency, and educational attainment. The second applies these perspectives to stress and mental health, especially as these dynamics operate among young people. Specifically, it examines how the structure of neighborhoods shapes everyday life, influencing exposure to stress and access to resources and, hence, affecting risk of disorder. The third section discusses the implications of a neighborhood orientation for preventive intervention strategies.*

## **Theoretical Perspectives on Neighborhood**

### **The Concept of Neighborhood**

Neighborhoods are collections of people living near one another within a particular geographical area. Conceptualizations of neighborhood typically emphasize three dimensions: spatial, structural, and social.

- Spatial dimensions are the physical boundaries of the neighborhood. These boundaries are usually defined in research applications as census tracts or zip code areas, although these formal lines of demarcation only approximate the informal boundaries that actually separate communities. In simplistic terms, the area within these boundaries is the "container" for social interaction among residents. Although adolescents operate in many overlapping social milieus, including family, school, and peer group, only their neighborhood has clearly defined spatial dimensions.

- The structural attributes of a neighborhood are the composite socioeconomic and demographic characteristics of the individuals who reside in that geographical area in the sense that a whole comprises its component parts. The neighborhood profile, then, accents traits generally shared by members of the collectivity, even though not all residents possess these traits. For example, if most neighborhood residents are poor and Latino, the aggregate neighborhood is poor and Latino even though it also contains persons of other racial/ethnic backgrounds and those with more adequate financial resources. Most studies focus on socioeconomic status and, to a lesser extent, racial segregation as the key structural characteristics of neighborhoods.<sup>1</sup>
- The third dimension of neighborhood, the social functions it performs, refers to the provision of informal support networks, security, identity, and a normative context in which children and adolescents are socialized (Brewster, 1994; DuBois & Hirsch, 1990; Logan & Molotch, 1987). For example, the reputation of one's neighborhood confers a sense of identity or social standing, particularly for adolescents (Anderson, 1990). These social functions are the mechanisms through which the structural attributes of a spatial area influence the life chances of its residents. For example, children who grow up in ghetto neighborhoods-- where the predominant sources of income are public assistance, illegal activities such as selling drugs, and minimum-wage jobs-- may learn to participate in the first two activities, which, from their vantage point, are the only viable options. Their latent socialization differs from that of children who grow up with neighbors who hold high-paying professional jobs. The latter learn the language and social skills required to participate in the labor force and witness directly the rewards of higher education in the lifestyles of their neighbors.

## The Impact of Neighborhood

Distinct research traditions have explored the connection between neighborhood and individual outcomes.

- The *structural orientation* concerns the production and maintenance of systems of stratification within a geographical setting, particularly the creation of underclass communities (Massey & Denton, 1993; Wilson, 1987). This perspective compares rates of individual outcomes (e.g., school attrition) across neighborhoods of varying socioeconomic status (SES) and racial or ethnic compositions. *It is concerned, then, with the overall or modal impact of neighborhood as distinct from variation in individual responses to a particular setting.* The latter is attributed to variable exposure to these conditions and to independent family or individual risk factors (Crane, 1991).
- In contrast, the *ecological orientation concerns the mechanisms linking neighborhood to individual outcomes*, in particular why some youth in high-risk settings demonstrate negative outcomes while others attain successful outcomes (Jessor, 1992, 1993). Jessor identifies *factors that potentially mediate the structural influences of neighborhood*, which he groups into *risk factors* (e.g., neighborhood poverty, racial segregation, and physical decay) and *protective factors* (e.g., community institutions and positive role models). *These mediators include the adolescent's subjective perception of his or her neighborhood, the family environment, and individual attitudes and personality.* Although a large literature relates these factors to adolescent outcomes, their relationship to the structural dimensions of neighborhood has yet to be elaborated in any detail.

Jencks and Mayer (1990) have integrated the structural and ecological perspectives and developed a taxonomy of ways neighborhood might influence behavior. The association between neighborhood structure and individual behavior is mediated by the ecological context. The mechanisms that link the ecological context to individual behavior include (a) *social contagion models* in which problem behaviors are spread through peer pressure and, after passing some unknown threshold of susceptibility, become epidemic; (b) *collective socialization models*, which posit that adult role models create social norms that youth internalize and act upon; (c) *institutional models*, focusing on how established community organizations such as schools, police, or churches create and enforce social norms; and (d) *relative deprivation models*, which assert that individuals evaluate their situation relative to their neighbors.

- The first three models share a common orientation, which Jencks and Mayer (1990) refer to as the "disadvantages of disadvantaged neighbors." Specifically, adolescents are more likely to participate in socially undesirable activities in poor neighborhoods because these behaviors are prevalent and social control is lax. These models posit a main (albeit indirect) effect of neighborhood on the outcome of interest.

- The fourth model, relative deprivation, emphasizes the "disadvantages of advantaged neighbors" (Jencks & Mayer 1990). Specifically, affluent neighborhoods benefit their affluent residents while simultaneously creating difficult conditions for their disadvantaged residents. For example, disadvantaged youth who live in relatively affluent neighborhoods may withdraw from society (e.g., drop out of school) or act against prevailing social norms (e.g., become juvenile delinquents) because they feel they cannot compete successfully with their advantaged peers. The relative deprivation model, then, does not assume that neighborhoods affect all residents uniformly, but instead predicts interactive effects.

As noted by Jencks and Mayer (1990), these mechanisms-- social contagion, collective socialization, social control, and relative deprivation-- may operate simultaneously, confounding empirical attempts to measure neighborhood effects. In addition, factors such as relative deprivation may counterbalance the beneficial effects of advantaged neighborhoods so that neighborhood structure appears unrelated to outcome. Moreover, neighborhoods may operate differently across varying contexts, populations, and behavioral outcomes (Tienda, 1991).

### **Empirical Evidence for Neighborhood Effects**

Previous research finds evidence of neighborhood effects beyond family influences and individual characteristics for some adolescent outcomes. The modal neighborhood influences the nature of community life over and above the contributions from each resident's own attributes, and modal attributes may interact with individual attributes. For example, the experience of a Latino living in a predominantly Latino neighborhood is likely to differ both from that of a Latino living in a predominantly African-American neighborhood and from that of an African American living in a predominantly Latino neighborhood. Thus, as is often the case, the whole in this instance is more than the sum of its parts inasmuch as a neighborhood exists only as an aggregation. Indeed, the position of the individual relative to the local norm may be a key contributor to the social psychological impact of neighborhood. For example, in the relative deprivation model, low social standing is seen as being especially onerous when one lives surrounded by more well to do neighbors.

Previous research finds evidence of neighborhood effects beyond family influences and individual characteristics for some adolescent outcomes.

- *The strength and nature of neighborhood effects appear to differ, however, depending on the behavioral outcome and population studied.* Neighborhood effects appear to be quite strong for some adolescent outcomes (e.g., childbearing), weak for others (e.g., crime), and countervailing for still others, so that they appear to cancel out one another (e.g., education). Moreover, the influences of a particular neighborhood context may differ according to the individual characteristics of the adolescent. Certain adolescents may benefit from a given neighborhood environment through one process (e.g., collective socialization), while others suffer negative consequences of living in the same neighborhood (e.g., relative deprivation).
- In addition, *at least some neighborhood effects appear to be nonlinear.* For example, Crane (1991) found that neighborhood SES effects were linear except in the worst neighborhoods, where there was a dramatic increase in the probability of having a premarital birth and dropping out of school. Similarly, Hogan and Kitagawa (1985) classified neighborhood quality on the basis of social, economic, and demographic characteristics. They found that African American teens from low-quality neighborhoods had pregnancy rates that were one-third higher than the rates in either medium- or high- quality neighborhoods. Nonlinear effects are also suggested by studies showing extreme rates of problematic behavior, including juvenile delinquency (Peeples & Loeber, 1994) and childhood aggression (Attar, Guerra, and Tolan, 1994), in the most disadvantaged neighborhoods.

- *There is some evidence that structural neighborhood characteristics not only affect childhood outcomes over and above family characteristics, but that neighborhoods also affect child well being indirectly by influencing parent-child interactions.* For example, Klebanov, Brooks-Gunn, and Duncan (1994) report that neighborhood poverty is associated with less maternal warmth (e.g., physical contact) toward 3-year-olds and with a physical home environment that is not conducive to child development (e.g., dark interior of home and unsafe outside play area). Sampson and Laub (1994) suggest that neighborhood poverty reduces the capacity of families to supervise older children by detrimentally affecting parental discipline and parent-child attachment. Parents may respond to the social isolation and physical dangers of living in underclass communities by choosing more punitive and coercive parenting styles (McLoyd, 1990; Sampson & Laub, 1994; or by withdrawing from their children emotionally (Klebanov et al., 1994).

In sum, growing up in an underclass neighborhood characterized by high rates of poverty and violence is associated with a disproportionate increase in a variety of negative adolescent outcomes, including dropping out of school, early childbearing, and juvenile delinquency. These findings are consistent with the links between extreme neighborhood poverty, social isolation, and deleterious outcomes posited by Massey and Denton (1993) and Wilson (1987).

### **Neighborhoods, Poverty, and the Social Milieu**

Although it is by no means the only connection between neighborhood structure and experience, the linkage we wish to emphasize is between the aggregate concentration of poverty within neighborhoods and the individual impact of living with social decay and detachment. Massey and Denton (1993) have described the connection between poverty and social decay, in their analysis of the causes and consequences of racial and economic segregation.

- *They contend that the concentration of poverty within urban ghettos leads to a mutually reinforcing relationship between social decay and social withdrawal.* The decline of neighborhoods often is signaled by the emergence of public signs, e.g., public intoxication and graffiti, that violate previous community standards about what constitutes appropriate behavior in a "good" neighborhood. When residents perceive such a decline, they tend to retreat socially and psychologically from their communities; they stay away from certain sites, avoid strangers, remain indoors, and generally keep to themselves.
- Massey and Denton (1993) also tell us that *the withdrawal of residents from active community life loosens surveillance and control over behavior, permitting a growth in increasingly serious social problems and criminal acts.* This intensification then leads to greater social withdrawal, a further loosening of social controls, and an accelerating spiral of community instability and decline.
- They further assert that *these processes are intensified in hyper-segregated communities, leading to a shift to the in the normative environment and to the development of an oppositional culture* that inverts the values and ideals of middle- class American society.

Thus, the by-products of poverty and racial inequality, conditions such as crime, drugs, violence, illiteracy, and hopelessness, become isolated and concentrated within urban ghettos.

## **The Significance of Neighborhood for Mental Health**

We turn now from the general impact of neighborhood to the specific ways neighborhood is likely to influence adolescent mental health. As mentioned previously, empirical research on neighborhood and mental health is extremely limited. Research into the impact of neighborhood on juvenile delinquency and aggression, however, is informative inasmuch as these outcomes converge with behavioral disorders like conduct disorder and substance abuse (Kupersmidt, Griesler, De Rosier, Patterson, & Davis, 1995; Peeples & Loeber, 1994; Sampson & Laub, 1994). We are aided as well by existing research into the social etiology of mental and emotional disorders, especially research concerning social stress and symptoms of depression and anxiety.

## Theoretical Framework

Characteristics of neighborhood are consequential to mental health because these characteristics reflect the pool of social actors encountered daily. A person's social world is not restricted to neighborhood, of course, but many of the social interactions of children and adolescents occur within its boundaries. Neighborhoods are especially consequential for teens who lack ready access to other settings, such as those living in an underclass ghetto who may rarely, if ever, leave its borders (Massey & Denton, 1993).

### Pathways

We envision three broad connections between neighborhood context and adolescent mental health (Figure 2).

- First, we expect *a substantial portion of the gross association between structural characteristics and adolescent mental health to be mediated by the experiential neighborhood and by stress processes*. Co-variation remaining after these intervening factors are taken into consideration represents, in essence, unspecified pathways through which structure influences mental health. In other words, we see structure as affecting mental health because it systematizes the experience of ordinary life in ways that enhance or diminish one's chances of attaining and maintaining mental and emotional well being.
- The second *pathway links structure to the experience of daily life within the neighborhood*; this, in turn, is seen as directly affecting the mental health of its young residents.
- In the third linkage, *both the structural and the experiential dimensions of neighborhood affect adolescent mental health by regulating exposure to stressors and access to resources*.

## **Nonspecific Outcomes**

The disorders associated with these pathways include both internalizing and externalizing disorders-- depression, anxiety, oppositional defiant disorder, conduct disorder, and substance abuse dependence, as well as posttraumatic stress disorder. This enumeration, albeit not inclusive of all possible mental health outcomes, suggests that the outcomes need to be broadly conceived. The impact of neighborhood on mental health is conceptualized as nonspecific (i.e., affecting multiple domains of functioning), rather than being manifest as a single disorder (e.g., substance abuse).

## **Analytic Considerations**

*Models of neighborhood and mental health are inherently inter-group* because differences in rates of disorder across neighborhoods can be explained only by corresponding differences in the attributes of those neighborhoods, and these attributes pertain to the collectivity, not to the individuals comprising them. This observation does not mean that individual-level factors such as personal history, temperament, and the attribution of meaning are unimportant, merely that these qualities are more useful to understanding individual differences than group differences. The latter requires a consideration of the ways groups are distinct from one another that are consequential to mental health. The groups with which we are concerned are the clustering of residential areas.

However, *neighborhoods usually are internally heterogeneous on the same characteristics that differentiate one neighborhood from another*. For example, neighborhoods may be differentiated economically in terms of average income, housing cost, net worth of residents, and so forth, but affluent neighborhoods typically contain those of modest means as well, and the poorest neighborhoods contain some residents who are reasonably well off. Although affluent and poor neighborhoods differ in their distributions of wealth, each also contains those who are wealthy and those who are poor, in relative if not absolute terms. Furthermore, the standing of the individual relative to the group norm is a key element in theories seeking to account for the impact of neighborhood structure (e.g., theories of relative deprivation; Jencks & Mayer 1990).

The impact of neighborhood on mental health, therefore, should be sought in terms of two analytic models.

- One is formed by the *modal neighborhood*: Dominant attributes of the community tend to exert a fairly uniform influence on most of its members. *This type of connection is one of central tendency*: What is most typical of a setting produces a general propensity such that harsh neighborhoods tend to jeopardize mental health, while benevolent communities are conducive to well-being, even when hardship does arise. From this perspective, variation in mental health within neighborhoods would result from differential exposure to neighborhood characteristics, both good and bad.

- The second focuses on *the intersection of neighborhood norms and individual attributes*. *This type of connection is inherently interactive*: The impact of neighborhood varies across individuals. The interactive effect is especially useful in understanding variability in mental health within neighborhoods (i.e., the reasons harsh neighborhoods are not uniformly destructive and benevolent neighborhoods prove detrimental to some residents). We have already commented on the contribution of individual attributes to the risk of mental disorder; here, we call attention to the interaction of these attributes with characteristics of the neighborhood. *The individual attributes with which we are especially concerned are those that signify one's position in stratified social systems, as distinct from idiosyncratic traits like personal history*. Our focus is on attributes such as family SES, race/ethnicity, and gender. These attributes help establish the social standing of the individual relative to the surrounding community and, thus, are useful for uncovering social regularities in the influence of neighborhood.
- *Interactive effects may also identify the conditions under which neighborhood matters to mental health*. Specifically, *neighborhood may modify the effects of other risk factors, amplifying or dampening their harmful effects*. For example, a recent study suggests that children living in conditions of extreme neighborhood disadvantage are most adversely affected by stressful life events (Attar et al., 1994). Similarly, vulnerable youth with few personal assets benefit most from living in communities in which there is a low level of problem behavior (Blythe & Leffert 1995).

These two models are specific instances of the general models discussed by Jencks and Mayer (1990). *The modal neighborhood is akin to the "advantages of advantaged neighbors" class of explanation, while interactive effects are similar to "disadvantages of advantaged neighbors" orientations*. For instance, rates of disorder may be elevated in poverty-stricken areas because young people are disproportionately presented with role models who engage in antisocial or self-destructive behavior; collective socialization patterns do not develop optimal coping strategies; or there are too few institutional resources available for those who need assistance in dealing with the numerous problems that arise when economic resources are constricted. On the other hand, some youth in affluent neighborhoods may be especially at risk

because their comparison of self to others creates a sense of relative deprivation; because they differ from the majority or from conventional standards, feel out of place, and participate in deviant subcultures; or because competition is especially intense, success uncertain, and self-worth tenuous. Kupersmidt et al. (1995) employ a similar framework, distinguishing a main effects model in which neighborhood acts as a risk factor from three interactive models-- protective, potentiator, and person-environment fit-- affecting only select subgroups of children. Their analysis of childhood aggression supports the interactive perspectives.

Similarly, it is possible that some youth benefit psychologically from living in generally destructive neighborhoods. Clark (1965) maintains that urban ghettos have protective features inasmuch as the physical separation from affluence shields residents from the pernicious effects of negative self-evaluations. This viewpoint has been criticized by Massey and Denton (1993), who contend that if urban ghettos are protective, it is in a debilitating manner; these coping strategies tend to maintain the very conditions that are damaging in the first place. This debate concerns the modal impact of neighborhood (i.e., the generalized tendency to benefit or harm the average person living in that environment).

An alternative possibility is that generally harmful neighborhoods are nonetheless beneficial for select residents (i.e., the effect of neighborhood is contingent upon individual characteristics). For example, some youth in poor neighborhoods may fare well psychologically because their comparison of self to others creates a sense of relative privilege: Although poor, they are above the community norm; disadvantaged, they have, nonetheless, achieved success through superior talent; or through effort and will they have beaten the odds stacked against them. This possibility does not entail the assumption that there are hidden benefits to being impoverished, as suggested by Clark (1965). Instead, the interactive possibility is predicated on the assumption that these environments are beneficial to some residents even though they tend to be generally detrimental.

*In summary, two types of neighborhood effects on mental health warrant investigation. One concerns the generalized impact of neighborhood on its typical inhabitant. The second concerns the differential impact of neighborhood contingent upon attributes of the individual.* One implication of these orientations merits emphasis. The positive and negative effects of neighborhood on mental health may counterbalance one another. If this were the case, neighborhood would empirically appear to be unrelated to mental health. Jencks and Mayer (1990) demonstrate that this type of suppressor effect is plausible by showing offsetting epidemic and relative deprivation effects for educational attainment. Thus, *it is imperative that the mechanisms through which neighborhood affects mental health be specified so that the positive and negative effects, if any, of the same neighborhood can be separated.* We turn now to a more detailed discussion of the three connections between neighborhood context and adolescent mental health.

### **Connection 1: The Structure of Neighborhoods and Mental Health**

*Neighborhood differences in SES & race/ethnicity.--* The impact of neighborhood structure is demonstrated by our recent work on the mental health of adolescents (Aneshensel & Sucoff, submitted). We have been able to explore this connection because a census-based sampling frame was employed to link information about the composition of census tracts to individual level survey data.<sup>2</sup> 1990 Census data operationally defined neighborhood characteristics for two aspects of social stratification: SES, specifically median household income, percentage of population below the poverty line, and percentage of the labor force in professional, executive, or management level occupations; and racial/ethnic composition, specifically, percentage African American and percentage Hispanic.<sup>3</sup> *A cluster analysis reveals that these neighborhoods are stratified by SES, representing the full spectrum from underclass to affluent, and are segregated by race/ethnicity; the poorest neighborhoods tend to be exclusively high-density minority, whereas the most affluent tend to be high-density non-Hispanic white.*

*Neighborhood differences in disorders.*-- Thus far in our analysis of these data, we have examined two internalizing disorders, depression and anxiety, and two externalizing disorders, conduct and oppositional defiant.<sup>4</sup> *There are statistically significant zero-order differences across neighborhood clusters for the two externalizing disorders, but the two internalizing disorders do not differ across clusters.*

- *There are neighborhood differences in the average number of behaviors indicative of oppositional defiant disorder ( $p \leq .001$ ) and conduct disorder ( $p \leq .05$ ). The most striking feature is the difference in the distributions of the two disorders. Symptoms of conduct disorder are most evident in strictly underclass neighborhoods, but symptoms of oppositional defiant disorder are most evident in middle-class and more affluent neighborhoods.*
- *In addition, two of the three clusters of working-class neighborhoods manifest low levels of both sets of problematic behavior; high densities of African Americans characterize both of these clusters.*
- *The third type of working-class neighborhood, which has a low density of African Americans, is toward the high end of the distributions for both sets of troublesome behaviors.*

We had anticipated that both externalizing disorders would be most prevalent in underclass neighborhoods, given the connections between poverty, segregation, and the development of an oppositional culture described by Massey and Denton (1993). The two disorders are positively correlated ( $r = .44$ ;  $p \leq .001$ ), with oppositional defiant disorder entailing less serious violations of conventional standards of behavior than conduct disorder. Although the behaviors characteristic of oppositional defiant disorder might be interpreted as "normal" adolescent acting out, this possibility does not account for the dense concentration of these behaviors in middle-class neighborhoods.

We see this pattern as underscoring the need to specify the ways neighborhood is consequential to mental health. *This finding demonstrates that the idea that a neighborhood is uniformly beneficial or detrimental is overly simplistic, because it points to some potential risks of living in middle-class areas. Similarly, the lack of zero-order association between neighborhood stratification and the internalizing disorders should not be interpreted as indicating that neighborhood is irrelevant to depression and anxiety. Such a conclusion would be premature until the possibility of suppressor effects, mentioned previously, is explored.*

*Neighborhood differences in residential stability.*--We also explored a second aspect of neighborhood structure, residential stability --operationally defined as the percentage of households in the census tract occupied by the same residents for at least 5 years.

- *Adolescents living in neighborhoods characterized by a high density of long-term residents tend to exhibit relatively few symptoms of depression ( $r = -.08$ ;  $p \leq .05$ ) or anxiety ( $r = -.09$ ;  $p \leq .01$ ), yet residential stability is not correlated with behaviors indicative of the externalizing disorders.*

Thus, *residential stability does vary across neighborhood clusters; but its association with adolescent mental health appears to be separate from that of stratification, given that the stratification clusters are not associated with the internalizing disorders.*

The zero-order associations described here illustrate some general principles, although these correlations by no means establish causal connections.

1. The impact of neighborhood structure does not appear to be uniformly harmful or beneficial. Instead, neighborhoods that are conducive to the development of some disorders appear to be innocuous with regard to other outcomes. (Kupersmidt et al., 1995).
2. Although SES is generally inversely associated with disorder, advantaged neighborhoods may nevertheless pose special risks for select disorders.
3. Multiple dimensions of neighborhood structure are relevant to mental health. For example, aspects of stratification may be most important with regard to externalizing disorders, while aspects of social stability may be most important to internalizing disorders.
4. Finally, these overall associations, of admittedly modest magnitude, tap only the modal effects of neighborhood structure, not the differential impact of neighborhood across subgroups of the community.

The potential for offsetting costs and benefits means that it is necessary to specify the mechanisms through which structure matters to mental health as well as the conditions under which these mechanisms function.

## Connection 2: The Structural and Experiential Dimensions of Neighborhood

Two aspects of the experiential neighborhood are especially pertinent to the linkages between structure and mental health: (a) ambient hazards, the presence of threatening conditions like violent crimes, graffiti, gangs, and drug use; and (b) social cohesion, the extent to which people in the neighborhood know one another.<sup>5</sup>

- The neighborhood clusters are associated with the perception of the neighborhood as threatening. *Three types of neighborhoods are distinctive: the most impoverished areas, which on average are seen as most hazardous, and the middle-class and affluent communities, which tend to be seen as least hazardous.* Between these extremes, adolescents tend to rate their neighborhoods similarly.
- Social cohesion, a second dimension of the experiential neighborhood, is differentiated only slightly by the set of neighborhood types, and no one neighborhood type emerges as distinct from the others. *Adolescents living in neighborhoods characterized by a high density of long-term residents tend to perceive their neighborhoods as socially cohesive ( $r = .07$ ;  $p \leq .05$ ), but the zero-order correlation with ambient hazards is not statistically significant.*
- However, *both social cohesion and ambient hazards are associated with residential stability in a multivariate analysis that controls for neighborhood stratification and for how long the adolescent has lived in the neighborhood* ( see Aneshensel & Sucoff, submitted, for analyses). In other words, adolescents who live in residentially stable neighborhoods tend to see their communities as both safe and cohesive irrespective of how long they themselves have lived there.

Massey and Denton (1993) found structural conditions such as these to be detrimental to mental health at least in part because they contribute to an environment that is experienced as noxious and barren. The experience of environmental threat is likely to influence mental health directly, as is the sense that one is living among people who are socially disconnected from one another. The latter is further evidenced by the vast literature on social stress and social support, especially with regard to disorders like depression and anxiety.

The influence of the experiential neighborhood may entail an interaction with individual-level risk factors. In other words, community conditions may be immaterial to persons who are not predisposed to these behaviors, but may facilitate the development of disorder among those who are especially vulnerable because of their exposure to other risk factors. In our data, both ambient hazards and social cohesion are associated with adolescent mental health.

- *Perceptions of one's environment as threatening are positively correlated with symptoms of depression* ( $r = .17; p \leq .001$ ), *anxiety* ( $r = .13; p \leq .001$ ), *oppositional defiant disorder* ( $r = .13; p \leq .001$ ), and *conduct disorder* ( $r = .22; p \leq .001$ ).
- *Social cohesion is inversely correlated with depression* ( $r = -.16; p \leq .001$ ), *anxiety* ( $r = -.07; p \leq .05$ ), and *oppositional defiant disorder* ( $r = -.08; p \leq .001$ ), *but it is not correlated with conduct disorder*.

The correlations for ambient hazards are generally stronger than those for social cohesion, but both sets of correlations are of modest magnitude. Nevertheless, these associations establish the viability of the hypothesized linkages between neighborhood structure and adolescent mental health.

### **Connection 3: Neighborhood and the Stress Process**

Thus far, we have been concerned with the ways the experiential neighborhood directly influences the risk of mental, emotional, and behavioral disorder among adolescents. This connection exists, at least in part, because neighborhoods characterized by threatening conditions, such as drugs, gangs, and violence, are inherently stressful, especially in the absence of social resources that might otherwise control or offset these threats. *However, the experiential neighborhood is also likely to influence mental health indirectly.*

We employ the framework of the stress process to link neighborhood to adolescent mental health. Stress processes are by no means the only potential connection between these two domains, but this orientation is a useful departure point because the connection between stress processes and mental health is generally well established. Furthermore, the notion that individual exposure to stress is related to the amount of stress in one's social environment seems almost self-evident, as does the corollary that the connectedness of persons in one's social environment influences one's own immediate access to social support.

The three major components of the stress process as formulated by Pearlin are stressors, mediators, and outcomes (Pearlin 1989; Pearlin, Lieberman, Menaghan, & Mullan 1981).

*Stressors*-- Stressors refer to environmental demands that exceed the ordinary adaptive capacity of the individual, or to closed opportunity structures for the satisfaction of individual needs (Aneshensel 1992; Lazarus 1966; Lazarus & Folkman 1984; Menaghan 1983; Pearlin 1982). Stressors are elements of the environment, external to the individual. Stress refers to an internal state of arousal resulting from exposure to stressors. Thus, stress is not an inherent attribute of external conditions, but emanates from a lack of fit between the individual and the environment. In an analogy to engineering physics, Smith (1987) maintained that stress should be seen not merely as load, but as load relative to the supporting surface. Nevertheless, socioenvironmental conditions differ in their capacity to evoke stress: Some conditions threaten virtually everyone; others are almost uniformly navigated with ease.

Although stressors come in various shapes and sizes, our theoretical model emphasizes problematic conditions that (a) parallel the experiential dimensions of neighborhood described above and (b) generate psychological distress. A likely candidate to fill this mediating role is *individual exposure to trauma and crime*. *One of the two necessary connections already is well established in the literature on traumatic stressors; exposure to such events is a known risk factor for certain psychiatric disorders. The second connection concerns the link between neighborhood and exposure to traumatic stressors. Suggestive evidence for this connection is found in a study linking neighborhood disadvantage to exposure to violence and other life event stressors among school-aged children (Attar et al., 1994). Furthermore, such exposure is also likely to be inversely associated with the social cohesion of the neighborhood, because erosion of the social psychological community permits an increase in rates of antisocial behavior (Massey & Denton 1993), which, in turn, necessarily increases rates of victimization.*

Mediators.--The second component of the stress process, *mediators, comprises the social, personal, and material resources that regulate causal relationships between stressors and outcomes*. Of numerous potential mediators, *we focus on social integration and support; these concepts parallel our focus on the social cohesion of neighborhoods*. Definitions of support abound, but most include a person's basic social needs-- affection, esteem, approval, belonging, identity, and security-- being satisfied through interaction with others (Cobb, 1976; Thoits, 1982). *Numerous studies have demonstrated that social support is inversely related to mental, emotional, and behavioral disorders. In addition, the impact of stress is thought to vary inversely with resources, i.e., exposure to stress is most damaging when resources are scarce or absent.* (Aneshensel, 1992). In the literature on social stress, this conditional relationship is referred to as *stress buffering*.

*Social resources are hypothesized to mediate the impact of neighborhood on mental health. Again, one of the two necessary connections, the link between support and disorder, is well established in the empirical literature.* The second connection, between neighborhood and support, is suggested by the literature on the structure of social networks and the derivation of social support (DuBois & Hirsch 1990; Sampson 1988). *The precise nature of this relationship between individual level support and neighborhood cohesion, however, requires further specification. We expect, too, that social support lessens in the context of threatening environments that lead people to withdraw from their communities, diminishing the pool of attractive social actors in the immediate environment.*

*These elements of the stress process entail aspects of social life that are intrinsic to the neighborhood:* Individuals who live in threatening and inhospitable environments are more likely to be victimized than those who live in benign communities and to have attenuated social connections that impede efforts, both individual and collective, to neutralize macro level stressors. From this perspective, exposure to trauma and crime constitutes what Pearlin refers to as *primary stressors* (Pearlin, Mullan, Semple, & Skaff 1990).

*Neighborhood and mental health are also likely to be linked through the proliferation of secondary stressors. According to Pearlin, secondary stressors are problematic circumstances that arise as a consequence of a primary stressor, but are not inherent in the original stressful condition.*

In this instance, secondary stressors are problems that have arisen as a result of threatening conditions in the neighborhood but that do not directly entail firsthand transactions with the neighborhood. For example, concerns about street crime, drug dealing, and gangs may lead parents to be fearful for their children and to impose rules about where they may go, with whom, and at what times. In turn, these restrictions may lead to arguments not about the quality of the neighborhood, but about the adolescent's desire for increased autonomy. In this example, parent-child conflict is considered a secondary stressor because it arises as a result of neighborhood conditions, rather than concerning the neighborhood per se.

Although unsafe neighborhoods are no doubt stressful in and of themselves, *we believe that the most potent psychosocial consequences of neighborhood are found in the proliferation of secondary stressors.* The most visible consequences of living with poverty and urban decay are just that, surface manifestations, no matter how repugnant or deadly. Decrepit and abandoned housing is consequential not merely because it shelters residents inadequately, but because it contributes to a worldview that permeates all facets of life. The same observation can be made for the presence of crime, drug dealing, and the other social problems that have become commonplace features of too many neighborhoods. *Thus, the investigation of neighborhood linkages to mental health should not be restricted to domains that clearly are neighborhood, but should extend into diverse areas of life that are shaped by the neighborhood context.*

*Outcomes.* The third component of the stress process, outcomes, refers in this instance to adolescent mental health. *The general premise that rates of disorder vary as a function of neighborhood structure is supported by our research as reported above, as is the supposition that these effects depend upon the experiential neighborhood as well. These data also demonstrate, however, that the effects of neighborhood are specialized rather than universal.* In other words, neighborhood attributes do not uniformly elevate risk for all disorders (Kupersmidt et al., 1995). *For example, socioeconomic stratification appears to be more important to externalizing disorders, while residential stability appears to be more important to internalizing disorders.*

One explanation for this specificity can be found within the mediating pathways of the stress process. The immediate influence upon mental health consists of the stressors to which adolescents are exposed and the resources to which they have access. Although noxious neighborhoods are expected to generate pervasively high levels of stress, this association is unlikely to be present for each and every possible type of stressor. Instead, attributes of neighborhood are likely to generate specific kinds of stressors, which, in turn, increase the risk of distinct types of disorder. The type of outcome most affected by neighborhood, then, depends on the dimension of neighborhood in question and its consequences for the array of stressors that impinge upon residents' lives.

Nevertheless, *we conceive of the impact of neighborhood as diffuse rather than disorder-specific*. Whereas pernicious neighborhoods may not elevate all stressors, their effects are likely to extend to numerous sources of stress whose influence is felt across a broad band of mental, emotional, and behavioral functioning. For example, residents of poverty-stricken neighborhoods may be spared the intense pressures of the upper echelons of corporate life, but they are at elevated risk for encountering both closed opportunity structures and extreme financial duress; the poor neighborhoods may be most conducive to oppositional defiant behaviors, whereas affluent areas may be most susceptible to anxiety and depression.

The diffuse impact of neighborhood means that its mental health effects must be sought across multiple manifestations of disorder. Examining only one disorder, such as depression, is informative about the social etiology of depression, but yields potentially misleading conclusions about the mental health effects of neighborhood. The etiologic impact of neighborhood for a single disorder is distinct from and cannot be equated with the overall effect of neighborhood on mental health. This principle has been demonstrated theoretically and empirically for the etiologic role of stress for specific disorders versus its overall impact on mental health (Aneshensel, Rutter, & Lachenbruch, 1991).

The same principle applies to neighborhood. That is, the use of a single disorder provides unbiased estimates of the etiologic role of neighborhood for that disorder, but underestimates the total mental health effects of neighborhood. Equally important, the misclassification of persons with other psychiatric disorders provides biased estimates of the impact of neighborhood-related stressors (Aneshensel et al., 1991). Consequently, research into the mental health effects of neighborhood must evaluate the full spectrum of potential outcomes. Each individual piece of research need not implement this desideratum, but the field as a whole should strive to accomplish this end.

## Implications for Prevention

We have described several pathways through which the mass organization of society may affect the individual in ways that are consequential to his or her mental health. Our primary emphasis has been on stratification and its implications for exposure to stress and access to resources, as well as on known antecedents of mental, emotional, and behavioral disorder. This framework sets individual experience within a social context comprising both proximal and distal elements and, thus, identifies several strategic points of intervention.

This perspective is especially useful with regard to young people because their embedment within larger social orders is sometimes overlooked in favor of more immediate social influences, particularly those of family and peers. *Connections between the structural attributes of neighborhoods and collective measures of disorder demonstrate that strategies to promote mental health must take into consideration the macro level context in which people live. Separating factors that are under parental control from those that are not can encourage families to exert their influence in areas in which they can be efficacious.*

## **Re Universal Neighborhood Interventions**

The most distal elements of social organization considered here-- socioeconomic stratification, racial/ethnic segregation, and residential stability-- are not amenable to rapid or simple modification. Nevertheless, these macro-level factors should not be cast aside as immutable, no matter how resistant to change. The variation across neighborhoods that generates these systems of social organization is itself testimony to the potential for reorganization. *At minimum, information about the impact on mental health of the structural components of neighborhood should help to identify high- risk neighborhoods as locations of intervention.* The experiential neighborhood, which is seen as a conduit through which structure permeates the lives of individuals, offers a potentially powerful point of prevention. *The individual's experience of his or her neighborhood as threatening and socially disconnected is linked on one hand to the structural attributes of the neighborhood and, on the other, to the risk of disorder. These connections suggest that altering the experiential neighborhood may be a means of modifying the impact of structure on mental health.* We suggest that preventive interventions target the experiential neighborhood to lessen ambient hazards and to promote social cohesion, which might combine to lengthen residential tenure and, thus, create a social climate more favorable to well being. Examples of this strategy include community-based efforts such as neighborhood watch programs that reduce crime and violence, offer attractive alternatives to street life, and foster a sense of community.

An important feature of such community-based activities is an emphasis on the development of local initiatives and leadership as distinct from monolithic programs that flow from the top down. *Although the structural attributes of neighborhoods may be useful in identifying high-risk neighborhoods, these neighborhoods differ from one another in the specific constellations of stressful conditions that jeopardize mental health.* Local control is desirable because residents are most familiar with the experiential neighborhood and know firsthand its most salient features. Moreover, community-based implementation requires considerable interpersonal interaction among residents, which can itself foster social cohesion and thus indirectly advance the goals of the intervention ( Butterfoss, Goodman, & Wandersman, 1993). This strengthening of the social infrastructure of a neighborhood may also enhance its social control functions (Sampson & Laub 1994).

A desirable aspect of these kinds of community-based interventions is the potential to benefit not only those who participate, but also those who do not. In other words, change in the social environment affects all who live within that environment, regardless of whether they are responsible for initiating the change.

## **Re Selected Neighborhood Interventions**

*Likewise, prevention strategies need not necessarily focus on the neighborhood as an entity, but could instead target those who are most at risk within specific types of neighborhoods.* For example, some interventions might appropriately be designed for children from high-risk families, because they appear to be most affected by their exposure to high-risk neighborhoods (Attar et al., 1994).

In this regard, *further research is needed on the impact of the racial/ethnic composition of neighborhoods and their sociocultural components.* Our own research suggests that the adverse effects of socioeconomic disadvantage may be offset somewhat among those who live near people of similar backgrounds (Aneshensel & Sucoff, submitted). Such homogeneity may make it easier to forge relationships with one's neighbors, thus facilitating access to social resources, including social support and assistance with problems inherent to living in poverty.

This observation does not mean that segregation has beneficial consequences. Rather, it calls attention to the potentially elevated risk of individuals who are minorities in their neighborhoods, irrespective of their own racial/ethnic background and, possibly, their own socioeconomic circumstances. The potential interaction between race/ethnicity and the racial/ethnic composition of one's community requires further examination, especially in the context of contemporary intergroup tensions and conflict. Indeed, interventions on intergroup conflict resolution may have indirect benefits to community mental health.

## **Re Family Centered Interventions**

*Our emphasis on neighborhood is complementary to family-based interventions because at least some neighborhood effects are transmitted to children via their parents. For example, the social isolation of hyper-segregated communities impedes the job-seeking efforts of residents (Wilson 1987), whereas unemployment, a major stressor, elevates the risk of disorder (Dooley, Catalano, & Hough 1992; Dooley, Catalano, & Wilson 1994). Parental economic stressors, including job loss, appear to jeopardize the emotional well-being of children by compromising parenting behavior (Conger et al., 1992; Elder & Caspi, 1988; McLoyd, 1989, 1990; Sampson & Laub, 1994). In addition, the fatalism experienced by parents whose lack of education and skills have steered them into low-paying, dead-end occupations can translate into child-rearing practices that hamper the development of self-efficacy and hence impede adaptation to stress (Kohn, 1972; Pearlin & Radabaugh, 1976; Ross & Mirowsky, 1989; Wheaton, 1983). These connections suggest two points of intervention: the development of parenting skills, especially under conditions of stress, and the provision of support to parents that enables them to cope more effectively with difficult life circumstances. It also underscores the importance of community mental health services, because poor parents typically lack the financial means to pay for treatment.*

## **Re Intervention in the Neighborhood Physical Environment**

We want to comment too on the potential impact of the physical environment on the mental health of its residents. The pervasive correlation between ambient hazards and indicators of adolescent mental health suggests that altering the material elements of neighborhood should be considered as an intervention strategy. Massey and Denton (1993) contend that the physical decay of neighborhoods plays a crucial role in the emergence of deviant behavior and social withdrawal, and they assert that a critical threshold of housing abandonment triggers an exponential acceleration of these processes.

In Los Angeles, for example, graffiti has emerged as an important element of the physical environment. Graffiti is often a territorial marker, declaring turf, warning off rival gangs, and signaling the need to both exercise extreme caution and conform to prescribed behaviors. As such, the graffiti itself represent a threat. In recognition of this cycle, some neighborhood coalitions have launched graffiti-control projects. Although the physical removal of graffiti does not eliminate gang-related threats and promote mental health, the collective action required to mount such efforts constitutes an investment by people in their neighborhoods. Concerted responses of this type may act as brakes to neighborhood decline, especially in areas that are teetering on the edge of catastrophic decline.

## Re Evaluation of Interventions

Finally, let me say a word about the evaluation of preventive interventions. The impact of neighborhood on mental health appears to be specialized, manifest across some dimensions of functioning but not others. In other words, neighborhoods are not arrayed on a single continuum of good to bad with regard to implications for mental health. Consequently, *interventions that seek to modify aspects of neighborhood should not be expected to generate uniformly positive effects across all types of disorder.* Instead, these effects should be sought in the outcomes most clearly relevant to the nature of the intervention. *For example, an intervention that enhances the social control functions of neighborhood might be effective with regard to anxiety but have a negligible impact on depression, whereas depression might be more responsive to interventions that foster a sense of community. If interventions and measured outcomes are misaligned, we run the risk of erroneously concluding that an intervention has been ineffective.*

Similarly, some neighborhood effects may be pervasive while others are felt only among a *select subgroup of the population.* This possibility is anticipated in theoretical models that specify main versus interactive effects of neighborhood. For example, living in a neighborhood taken over by gangs and beset by rampant drug use and dealing is expected to adversely affect mental health, but this type of neighborhood may have the greatest impact on members of high-risk families (Kupersmidt et al., 1995). Interventions that "clean up" a neighborhood would tend to be manifest in a general improvement in mental health on the one hand, and, on the other, in improvements among only some residents. Consequently, both of these possibilities, modal and contingent effects, need to be assessed in the evaluation of preventive interventions.

## **Conclusion**

The theories and research we have presented here establish the utility of placing prevention strategies within a larger ecological framework, one that takes into consideration the structural and experiential contexts within which individual-level processes take place. This ecological orientation is especially valuable because contextual factors appear to interact with individual-level processes. In other words, the impact of individual risk factors on mental health appears to be modified by the context in which these risk factors occur. This approach may help identify communities in which residents are most at risk for developing mental, emotional, or behavioral disorder and, equally important, those residents who are most at risk within specific types of neighborhoods. The ability to target areas and subpopulations in this manner could maximize the effectiveness of preventive intervention strategies. This goal is especially important for young people: This life course stage offers unique opportunities for prevention because psychiatric disorder often first appears during these ages, pre-adult onset is a major risk factor for subsequent adult disorder, and the benefits of early prevention accrue over the entire life course.

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## Endnotes

. . . . These neighborhood characteristics have been operationalized in two ways: as sets of continuous variables describing the different neighborhood characteristics (e.g., Brewster 1994; Klebanov, Brooks-Gunn and Duncan 1994) and as composite measures of multiple characteristics (e.g., Hogan and Kitagawa 1985; Kupersmidt, Griesler, DeRosier, Patterson, and Davis 1995; Peeples and Loeber 1994). The multivariate approach assumes linear relationships between neighborhood context and the dependent variables, and that the neighborhood variables are not highly correlated with one another. If these assumptions are met, this approach has more statistical power than techniques that collapse information into composite measures. Moreover, it is more useful from a policy standpoint because it identifies the "independent" contributions of various dimensions of neighborhood structure. In contrast, composite measures, such as factor scores or typologies produced using cluster analysis, are more appropriate when neighborhood effects are nonlinear or neighborhood variables are colinear (White 1987). Crane (1991) and Hogan and Kitagawa (1985) demonstrate nonlinearity for at least three outcomes: high school completion, adolescent pregnancy, and nonmarital childbearing: The risk of these events is dramatically higher in the poorest neighborhoods than in any other type of neighborhood.

2. Subjects were selected from a stratified, three-stage, area probability sampling frame of Los Angeles County: census tracts, blocks, and households, which were screened to ascertain whether an adolescent between the ages of 12 and 17 years lived at the address as a permanent resident; in eligible households, one adolescent was randomly selected. Of the 13,925 household addresses sampled, 1,417 were eligible, and of these, interviews were completed with 877 (61.9%) adolescents. The sample is weighted to the 1990 Census racial/ethnic distribution, to a flat age distribution, and to adjust for variability in selection probabilities resulting from households with multiple eligible adolescents.

3. Census terminology used in conjunction with Census data.

4. Depressed mood was measured with the Children's Depression Inventory (Kovacs and Beck 1977), a 21-item inventory that assesses symptoms of depression during the past 2 weeks. Responses were scored from 0-4, and included choices such as "I do not feel sad," "I feel sad sometimes," "I am pretty sad all the time," and "I am so very sad that I can't stand it" ( $\alpha = .86$ ). Anxiety was assessed with a subset of eight items, e.g., "feeling nervous or shaky," from the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, and Covi 1974). Items were self-rated for the past 2 weeks based on response categories ranging from (1) "not at all" through (5) "extremely" ( $\alpha = .86$ ). The two externalizing disorders were assessed using subscales of the Stony Brook Child Psychiatric Checklist-3R (Gadow and Sprafkin 1987). Conduct disorder was assessed as a count (0 vs. 1) of 13 behaviors, e.g., "stolen or taken something belonging to another person" and "had a serious physical fight with someone," over the past year ( $\alpha = .73$ ). Oppositional defiant disorder was assessed in the same manner as conduct disorder for 6 behaviors, e.g., "blamed other people for your own mistakes" and "taken your anger out on others or tried to get even" ( $\alpha = .74$ ).

5. The adolescent's subjective appraisal of his or her neighborhood was assessed with a

study-specific list of Likert-type attributes, rated with response categories ranging from (1) "strongly agree" to (4) "strongly disagree." The ambient hazards measure asks about 11 potential dangers and demonstrates excellent reliability ( $\alpha = .90$ ): safety, violent crimes, drive-by shootings, property damage, gangs, drug use and dealing, graffiti, whether the police give people a hard time for no reason, and whether the neighborhood and housing are clean (scoring reversed), ugly, and in good shape (scoring reversed). The social cohesion measure demonstrates acceptable reliability ( $\alpha = .64$ ) across its three items: adults know each other, kids know each other, and people are friendly. Ambient hazards and social cohesion are modestly correlated with one another ( $r = -.27$ ;  $p \leq .001$ ).