It's all relative: Concentrated disadvantage within and across neighborhoods and communities, and the consequences for neighborhood crime

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A B S T R A C T

Purpose: Prior studies have largely been unable to account for how variations in inequality across larger areas might impact crime rates in neighborhoods. We examine this broader context both in terms of the spatial area surrounding neighborhoods as well as the larger, city-level context. Although social disorganization, opportunity and relative deprivation theories are typically used to explain variations in neighborhood crime, these theories make differing predictions about crime when the broader areas that neighborhoods are embedded in are taken into account.
Methods: We use data from the National Neighborhood Crime Study for 7956 neighborhoods in 79 cities. Multi-level models with spatial effects are estimated to explain the relationship between crime and city and neighborhood social and economic resources.
Results: Disadvantage in the focal neighborhood and nearby neighborhoods increase neighborhood violent crime, consistent with social disorganization theory. However, relative deprivation provides a more robust explanation for understanding variation in property crime, as the difference in disadvantage between a neighborhood and nearby neighborhoods (or the broader community) explains higher levels of property crime.
Conclusions: Criminologists need to account for the larger context of nearby neighborhoods, as well as the broader city, when understanding the effect of relative deprivation on neighborhood-level property crime rates.

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Numerous studies have found that absolute deprivation—typically measured as concentrated disadvantage—is a robust determinant of crime rates, either measured at the level of neighborhoods (see Pratt & Cullen, 2005; Sampson, Morenoff, & Gannon-Rowley, 2002), or at the level of larger units such as cities or SMSAs (Balkwell, 1990; Crutchfield, Geerken, & Gove, 1982; Williams & Flewelling, 1988). Another body of research has posited that the *distribution* of economic resources—*relative deprivation*—can explain levels of crime (Blau & Blau, 1982; Carroll & Jackson, 1983; Sampson, 1985). Inequality at the neighborhood level (Hipp, 2007; Messner & Tardiff, 1986) as well as within larger geographic units (such as cities or SMSAs) (Blau & Blau, 1982; Chamlin & Cochran, 1997; Land, McCall, & Cohen, 1990) is also associated with increased crime rates. A limitation of studies measuring inequality in such larger units is they are unable to account for how variations in inequality across larger areas such as *cities* might influence crime rates in *neighborhoods*. Cities with fewer financial resources are less able to assist disadvantaged neighborhoods, and this inaction might facilitate crime. This suggests that the criminogenic characteristics of neighborhoods might be augmented by the larger city context, impacting neighborhood crime.

While the larger city context is likely an important reference point for understanding crime at the neighborhood level, so too are the characteristics of the surrounding neighborhoods. Recent research has emphasized the fact that neighborhoods are spatially dependent and therefore influenced by the areas within which they are situated (Mears & Bhati, 2006). Variations in levels of economic resources in the larger areas that neighborhoods are embedded could result in more or less crime than would otherwise be expected (Mears & Bhati, 2006; Morenoff, Sampson, & Raudenbush, 2001). The potential influence of the surrounding context, then, is likely influential for neighborhood crime. Thus, both the characteristics of the surrounding neighborhoods, as well as the larger city context might *simultaneously* influence crime at the neighborhood-level. Indeed, different geographic scales—neighborhood, surrounding neighborhoods, city—are nested within one another, and each scale might have differing effects on local crime rates (Kirk & Laub, 2010). Although the relationship between economic disadvantage and neighborhood crime is well documented, the implications of disadvantage for neighborhood crime are less clear when *simultaneously* accounting for disadvantage in *both* the surrounding and broader city context, and assessing whether the neighborhood-level relationships differ based on these contexts.

The implications of the broader context on neighborhood crime vary depending on the theoretical lens applied. The social disorganization literature posits that concentrated disadvantage in the neighborhood

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and neighborhoods surrounded by disadvantaged neighborhoods will experience higher rates of crime. Extending the logic of social disorganization theory to a larger macro-context, it may be that neighborhoods located in disadvantaged cities will also have more crime. In this case, social and familial structures have been compromised, yielding a breakdown in normative behavior. On the other hand, opportunity theories (such as routine activities or crime pattern theory)[1] focus on the fact that disadvantaged neighborhoods near low disadvantage neighborhoods provide spatial positioning that creates more opportunities and hence may foster more crime. An alternative possibility from opportunity theories is that neighborhood crime would be lower when surrounded by disadvantaged areas as the lower levels of guardianship in those nearby neighborhoods would increase target attractiveness relative to the focal neighborhood. Relative deprivation theory also argues that disadvantaged neighborhoods near low disadvantage neighborhoods can foster more crime, but the mechanism for this theory differs as this nearby inequality is posited to create a greater sense of inequity, resulting in more offenders and hence more crime in the more advantaged neighborhoods. These considerations have important implications when taking into account the crime rate of neighborhoods in relation to other neighborhoods in the city, and the city itself. That is, although social disorganization, opportunity, and relative deprivation theories are typically used to explain variations in crime across neighborhoods, these theories make differing predictions about crime when taking into account the broader areas wherein neighborhoods are embedded.

Using data collected from 7956 neighborhoods in 79 cities, we seek to understand whether the context and characteristics of resource deprived neighborhoods matter with regard to crime. More specifically, we directly test how city-wide characteristics might condition crime at the neighborhood level, while simultaneously accounting for the larger spatial context. This allows us to disentangle how characteristics at various geographic aggregations (city and spatial) influence crime at the local, neighborhood level and how these different aggregations might operate relative to social disorganization, opportunity, and relative deprivation theories. We construct measures of concentrated disadvantage in the neighborhood, the surrounding neighborhoods, and the city to examine the extent that neighborhood crime rates are influenced by the spatial positioning of a neighborhood with respect to both the surrounding neighborhoods and the larger, macro-context.

Theoretical and conceptual background

There are a number of theories positing how environmental characteristics account for variations in neighborhood crime. We focus on three primary theories to explain how the broader context within which neighborhoods are situated might explain the relationship between resource deprivation and neighborhood crime: social disorganization theory, opportunity theories, and relative deprivation theory.

Social disorganization theory

A key theory linking ecological characteristics to neighborhood crime is social disorganization theory, which asserts that crime is a product of neighborhood dynamics (Shaw & McKay, 1942). According to social disorganization theory, high levels of disadvantage lead to more neighborhood crime due to the weakening of conventional institutions of social control, a lack of common values among residents, and the inability to regulate behavior, particularly among youth (Shaw & McKay, 1942). Three structural characteristics—socioeconomic status, residential instability and racial/ethnic heterogeneity—typified neighborhoods that Shaw and McKay characterized as socially disorganized. The social disorganization model, then, implies that neighborhoods with higher rates of poverty will experience more crime because they will have fewer available resources (social controls) to counteract

crime (Bursik, 1988; Sampson & Groves, 1989; Sampson, Raudenbush, & Earls, 1997).

The social disorganization perspective posits that factors associated with concentrated disadvantage result in decreased social control within a particular neighborhood (Sampson et al., 2002). Accordingly, if a neighborhood is characterized by high levels of disadvantage, and the surrounding areas are characterized by high levels of disadvantage, crime in the focal neighborhood will be greater. High levels of disadvantage (including poverty) are a magnet for criminal behavior, regardless of context because fewer resources are in place to discourage or deter criminal activity; thus, high levels of disadvantage will always yield higher crime.

This logic may extend to the spatial context of the larger, city-level environment that a neighborhood is embedded. The larger urban context can have a significant effect on a neighborhood's quality of life (Kubrin & Weitzer, 2003). A lack of resources across a particular city would only compound the effects of poverty on crime. Neighborhoods situated within disadvantaged cities would have higher rates of crime, as critical resources bolstering social controls are absent; furthermore, crime would be higher in the most disadvantaged neighborhoods in such cities, as these resources are even more limited. For example, in wealthy cities, such as New York City, disadvantaged areas are likely islands of disadvantage that segregate poorer areas from more advantaged places. City resources are likely targeted to these areas. Conversely, in poorer cities, like Detroit, the overall economic viability of the city likely impacts disorganization rates more universally across neighborhoods. Additionally, economic problems that plague a city will impact the neighborhoods of which it is comprised. For example, deindustrialization and disinvestment increase factors such as unemployment and poverty (Bursik, 1988; Stark, 1987; Shihadeh & Ousey, 1996), factors directly tied to social disorganization. While these macro-level changes would be felt across the neighborhoods of a city, the effects may be even more intense in neighborhoods already suffering from some degree of disadvantage.

From a social disorganization perspective then, greater levels of disadvantage in the neighborhood, nearby areas, or broader city will result in higher crime rates (both violent and property). Table 1 summarizes these relationships implied by social disorganization theory. Furthermore, the geographical clustering of disadvantage across neighborhoods will result in higher crime (an interaction effect), and disadvantaged neighborhoods located in disadvantaged cities will have higher rates of crime, as resources in these neighborhoods will be even more limited (a cross-level interaction effect). This is because neighborhoods themselves have a differential ability to acquire services: disadvantaged neighborhoods often lack the political economy to leverage city resources (Logan & Molotch, 1987), and disorganized neighborhoods typically have weak ties to formal institutions at the city level that might provide important benefits to the neighborhood (Bursik & Grasmick, 1993).

Opportunity theories

According to routine activities theory (Cohen & Felson, 1979) crime will occur when a motivated offender encounters a suitable target in the absence of a capable guardian. The intersection in time and space of these three components is most likely to occur as offenders go about their routine activities. Thus, routine activities theory posits that an offender always has an inclination to commit crime, but that actual crime events will depend on the circumstances at a point in time and space. This suggests that criminal events may be concentrated geographically relative to the presence of targets or the absence of capable guardians, regardless of whether the supply of motivated offenders is uniformly distributed across the neighborhoods of a city (Morenoff et al., 2001).

The spatial implications of routine activities theory are embedded in environmental criminology. Environmental criminologists focus on the