Navigating Dangerous Streets: The Sources and Consequences of Street Efficacy

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The concept of street efficacy, defined as the perceived ability to avoid violent confrontations and to be safe in one’s neighborhood, is proposed as a mechanism connecting aspects of adolescents’ “imposed” environments to the choices they make in creating their own “selected” environments that minimize the potential for violent confrontations. Empirical models using data from the Project on Human Development in Chicago Neighborhoods suggest that street efficacy is substantially influenced by various aspects of the social context surrounding adolescents. Adolescents who live in neighborhoods with concentrated disadvantage and low collective efficacy, respectively, are found to have less confidence in their ability to avoid violence after controlling for an extensive set of individual- and family-level factors. Exposure to violence also reduces street efficacy, although it does not explain the association between collective efficacy and individual street efficacy. Adolescents’ confidence in their ability to avoid violence is shown to be an important predictor of the types of environments they select for themselves. In particular, adolescents with high levels of street efficacy are less likely to resort to violence themselves or to associate with delinquent peers.

Researchers across the social sciences face an inherent difficulty in attempting to incorporate the neighborhood context into individual-level models of adolescent behavior. Although convincing arguments have been made about why the places where adolescents live matter for their developmental trajectories (Brooks-Gunn et al. 1993; Gephart 1997; Wilson 1987), much sociological research ignores the agency of individuals as they navigate their social worlds (Bandura 1997; Bandura 2001; Coleman 1988; Katz 1988). A key task for researchers studying adolescent development is to account for individual agency and the variation in individual behavior that occurs within social areas such as neighborhoods or schools, while also acknowledging the role that social contexts play in shaping developmental trajectories.

To do so, it is necessary to make a conceptual distinction between adolescents’ “imposed” and “selected” environments (Bandura 1997:163), and to identify the relationship...
between the two. Adolescents are subject to certain aspects of their physical and social environments over which they have little control, and which may limit the range of choices or opportunities available to them. It is this imposed environment on which researchers studying “neighborhood effects” focus in their analysis of adolescent development. However, within the imposed environment, adolescents are able to exercise choice, whether that choice is constrained or not, and to select certain features of the environment that enable them to pursue their own unique set of goals and ambitions. In this sense, individual agency plays a large role in determining how adolescents respond to their social setting and the types of environments they select for themselves.

An essential question is how aspects of the imposed environment affect the choices adolescents make as they select and create for themselves an actual, lived environment that will help shape their developmental trajectory. To answer this question, I draw on a social cognitive theory of behavioral adaptation—self-efficacy theory—to help explain choices relating to violence that adolescents make as they grow up in neighborhoods with varying levels of disadvantage and social organization (Bandura 1977; Bandura 1997). In applying self-efficacy theory to the study of individual violence, I argue that efficacy should be considered a contextual concept, in that aspects of the imposed neighborhood context are likely to combine with processes occurring in families and with characteristics of children to shape adolescents’ expectations about their ability to perform the actions necessary to achieve certain outcomes. In particular, the concept of street efficacy, defined as the perceived ability to avoid violent confrontations and find ways to be safe in one’s neighborhood, is proposed as a tool for incorporating the neighborhood context into the analysis of individual violent behavior.

I hypothesize that adolescents’ confidence in their ability to find ways to avoid violence is likely to affect the creativity and effort they expend in selecting environments and peer groups that minimize the potential for violent confrontations. In this sense, social cognition is conceptualized as a primary mechanism connecting the imposed environment and the selected environment, as depicted in Figure 1.

To test the relationship between the imposed neighborhood context, street efficacy, and the selected environment, several series of empirical models are estimated using data from the Project on Human Development in Chicago Neighborhoods (Earls et al. 1994; Earls et al. 1995). The first series examines the sources of street efficacy and shows that adolescents’ confidence in their ability to avoid violence is substantially influenced by aspects of the neighborhood context, especially the level of collective efficacy in the neighborhood. In a second set of models, I find preliminary evidence to suggest that adolescents with high street efficacy take steps to select environments that minimize the potential for violent confrontations. I find that adolescents with high street efficacy are less likely to behave violently themselves or associate with delinquent peers. However, adolescents confident in their ability to avoid violence are no less likely to take part in several types of unstructured activities associated with delinquency. Considered as a whole, the results provide support for a revised perspective on violence, one that emphasizes individual agency and the capacity of both individuals and collectivities to play an active role in reducing the potential for violence in their lives and communities.

THEORETICAL CONSIDERATIONS

Neighborhoods and Individual Agency

Neighborhoods vary with respect to the types of role models and peers they provide, the relative stock of various resources and support available to young people (e.g. the quality of schools, policing, health care systems, and programs for youth, as well as the informal oversight of public spaces by local residents), and

![Figure 1. The Relationship between Adolescents’ Imposed and Selected Environments](image-url)
the presence of poverty, drugs, weapons, crime, and violence (Anderson 1999; Jargowsky 1994; Wilson 1987). It is widely assumed that this variation affects the way children think about their future, the types of people they look up to as role models, the types of friends with whom they associate, and the opportunities available to them (Anderson 1999; Case and Katz 1991; Ellen and Turner 1997; Elliott et al. 1996; Sampson and Wilson 1995; Wilson 1987).

However, theories analyzing the ways that neighborhoods affect children have been criticized because they ignore the fact that children make choices about the people with whom they associate, the types of activities in which they engage, and the role models they choose for themselves. This critique is best expressed in a passage from Susan Mayer and Christopher Jencks’ review of the “neighborhood effects” literature up to 1990, in which the authors question the assumption that living in neighborhoods with deviant peers and poor role models should necessarily lead kids to negative outcomes: “Even in the poorest neighborhoods a teenager can find some friends who stay out of trouble, finish high school, go to college, and get good jobs. . . . As long as both kinds of role models exist [good and bad] their relative numbers may not matter much” (Mayer and Jencks 1989:1441). The implication is that characteristics of neighborhoods do not determine the way a given child will respond to his or her social setting. Instead, children respond to and shape their environment in very different ways, and agency matters in any context.

The distinction between adolescents’ “imposed” and “selected” environments allows for the integration of these contrasting perspectives on the role that neighborhoods play in influencing adolescent development. The imposed environment consists of everything that would surround the child if he or she were an inactive object. This includes all the people, all the physical structures, all the social interactions, and all the resources that could potentially affect the child purely on the basis of where that child lives. The selected environment is the imposed environment acted upon by the child. This includes all the people with whom the child actually comes into contact, the physical environments into which he places himself, the social interactions that he has, and the resources upon which he draws. It is, in essence, the lived environment of the child.

Critics of the neighborhood effects literature are correct in implying that the selected environment is, in many ways, more relevant to adolescent development than the imposed environment, yet one would be hard-pressed to make the argument that the two are unrelated. To reconcile these perspectives, a theoretical model is needed to explain the way that adolescents transform the imposed environment into their own unique, selected environment. I propose a contextualized version of self-efficacy theory as an appropriate model for this task.

**Efficacy on the Street**

Self-efficacy theory is based on the premise that changes in behavior “achieved by different methods derive from a common cognitive mechanism” (Bandura 1977:191). Bandura hypothesizes that the effectiveness of a diverse array of psychological treatments can be explained by their effects on efficacy expectations, defined as “the conviction that one can successfully execute the behavior required to produce [a given] outcome” (Bandura 1977:193).1 Support for the theory comes from a large body of experimental research demonstrating that efficacy expectations have a causal effect on subjects’ ambitions, the effort they expend to pursue these ambitions, and their persistence in this effort in the face of obstacles (Bandura 1997:54–61; Maddux 1995). Although the original applications of self-efficacy theory focused on the effects of psychological treatments designed to manipulate efficacy expectations in controlled contexts, the theory has been extended to help explain behavior in a wide variety of settings. Research has shown that self-efficacy is a strong predictor for a range of social outcomes including health behaviors, the academic performance of students, the performance of teachers and schools, and individual career choices (Bandura 1997).

Considering its development as a theory of behavioral adaptation in stressful environments, I argue that self-efficacy theory can be extend-
ed naturally to help explain adolescents’ responses to the pressures that they confront in disadvantaged urban settings. Efficacy theory is consistent with the notion that a primary mechanism by which the neighborhood context affects adolescent development is through its impact on cognition (Rosenbaum, Reynolds, and Deluca 2002; Ross, Mirowsky, and Pribesh 2001; Wilson 1987; Wilson 1996). For instance, Wilson (1987) argues that one consequence of the increasing social isolation of ghetto residents in the 1980s was the effect that these changes had on children’s perceptions. In describing how a child might be affected by living in a socioeconomically diverse neighborhood, Wilson (1987:56) writes:

A perceptive ghetto youngster in a neighborhood that includes a good number of working and professional families may observe increasing joblessness and idleness, but he will also witness many individuals going to and from work . . . . he may be cognizant of an increase in crime, but he can recognize that many residents in his neighborhood are not involved in criminal activity.

Implicit in this observation is the idea that the effects of social environments on individual behavior are at least partially mediated by internal cognitive processes. This idea is formalized in self-efficacy theory. In extending the theory to help explain adolescent behavior in urban areas, it is important to treat disadvantaged urban neighborhoods as unique ecological settings in which specific forms of efficacy are particularly important in everyday life. In neighborhoods wherein violence structures public interactions, the ability to manage potentially violent situations is an essential skill for children (Anderson 1999). The concept of street efficacy provides a theoretical tool that captures the importance of adolescent cognition for understanding individual behavior, while placing cognition within a broader social context.2

Sources of Street Efficacy

I conceptualize street efficacy as developing primarily from the interaction of individuals and their imposed environments (Bandura 1997:163). From this perspective, aspects of neighborhoods, families, and individual characteristics all may affect adolescents’ confidence in their ability to avoid violence. Beginning with characteristics of the child, I hypothesize that adolescents who lack key social skills—for instance, those with low verbal ability (Sampson, Morenoff, and Raudenbush 2005) or a tendency toward impulsive behavior (Farrington 1995, 1998; Gottfredson and Hirschi 1990)—may be ill-equipped to handle potentially violent social situations. This may in turn reduce their confidence in their ability to avoid violence and be safe as they engage in public life in the neighborhood.

Multiple aspects of the family environment also are likely to affect adolescent street efficacy. Adolescents in families with greater resources, both financial and social, are likely to have relatively high levels of street efficacy, especially if these resources are used by parents to provide enriching and safe environments for their children (Loeber and Stouthamer-Loeber 1986). Through cognitive processes of “modeling” (Bandura 1997), adolescents who witness family members engage in violence or crime, whether it occurs in or outside of the home, are less likely to believe that they can avoid violence in their own lives (Farrington 1995). On the other hand, parents who monitor their children closely may help raise their confidence by making them feel safe in the neighborhood or by reducing the chance that they will find themselves in vulnerable situations.

Shifting the focus to life outside the home, both structural characteristics of neighborhoods and social processes occurring within neighborhoods are likely to have an impact on adolescent street efficacy. First, high levels of violence in neighborhoods with concentrated disadvantage may reduce street efficacy simply by making it more difficult for adolescents to avoid violent confrontations. Elijah Anderson’s (1990, 1999) work provides a clear picture of the role that interpersonal violence plays in struc-

2 Street efficacy is similar in some ways to Anderson’s (1990) concept of “street wisdom,” which emphasizes individuals’ understanding of accepted patterns of interpersonal interactions in the public sphere. However, the street efficacy concept entails more than knowledge of common patterns of social interaction or an understanding of expected behavior norms. It also involves a belief in one’s own ability to manage such public interactions while avoiding violence.
uring public life in the most disadvantaged
urban neighborhoods. Adolescents who grow up
in such neighborhoods must expend a great
deal more effort to avoid violence than adoles-
cents in less distressed areas of the city or sub-
urbs.

At the same time, it is not only the presence
of structural disadvantage or violence that is
likely to affect adolescents’ perceptions, but
also the ways that community residents sup-
port and monitor local youth and the role that
the community plays in confronting violence
and maintaining social control. A growing lit-
erature on neighborhood social organization
emphasizes residents’ shared expectations about
their collective capability to achieve certain
ends, such as the oversight of local youth and
the reduction of violence (Sampson, Morenoff,
and Earls 1999). This perspective is captured in
the concept of collective efficacy, or the “dif-
ferential ability of neighborhoods to realize the
common values of residents and maintain effec-
tive controls” (Sampson, Raudenbush, and Earls
1997:918).

Adolescents are likely to pick up cues from
the community in which they live about their
own ability to avoid violence. In communities
where residents express a shared willingness
to support and monitor local youth and to inter-
vene in public life to enforce common norms of
behavior, adolescents intent on avoiding vio-
ence may feel more confident walking down
public streets, with the knowledge that they
have advocates looking out for them. Alterna-
tively, in communities where residents
retreat from public life and treat the presence
of violence with resignation, adolescents may feel
that attempts to avoid violence are futile, and
that they are on their own in their attempts to do
so. In other words, the same processes that acti-
vate a community’s collective desire to monitor
and support local youth may bolster adoles-
cents’ personal sense of agency in managing the
threat of violence in their own lives.

I thus hypothesize that after taking into
account characteristics of the child and his or her
family associated with violent behavior, aspects
of the imposed neighborhood context—specif-
ically the level of violence, disadvantage, and
collective efficacy in the neighborhood—will
influence adolescents’ street efficacy. Although
this hypothesis implies that neighborhoods have
a direct effect on street efficacy, these aspects
of the neighborhood environment also may
affect street efficacy indirectly by making it
more likely that adolescents will be personally
victimized or exposed to violence. Two primary
sources of efficacy expectations are past per-
formance at achieving a given outcome and
“modeling” processes, or “vicarious experi-
ences” (Bandura 1997). Clear successes and
failures offer subjects the most powerful evi-
dence of their current ability to perform the
behaviors necessary to achieve an outcome
(Ewart 1995; Maddux 1995:10). Similarly, if
subjects see “models” with the same condition
as their own successfully accomplish a partic-
ular behavior in circumstances similar to those
that they face, these vicarious experiences serve
to increase the subject’s confidence in his or her
own ability to perform the behavior (Bandura
1997:86–92). Translation of these mechanisms
to the social world of urban neighborhoods
leads to the hypothesis that adolescents who
have been unable to avoid violence in the past
and those who have witnessed frequent vio-
ence will have doubts about their ability to
avoid violence and be safe in their neighbor-
hoods.

**Street Efficacy and Violent Environments**

To this point, adolescents’ environments have
been discussed as if they are fixed and imposed
on individuals. Although the imposed environ-
ment has some aspects over which adolescents
have no control, a key element of efficacy the-
ory is the idea that environments are to some
extent selected and created, in the sense that ado-
lescents can draw upon certain aspects of the
potential environments available to them on the
basis of whether these selected aspects of the
environment are conducive to their own goals
and ambitions (Bandura 1997:163; Maddux
1995:12–14). I hypothesize that an adolescent’s
confidence in his or her ability to avoid violence
plays a crucial role in the process by which the
imposed neighborhood context is transformed
into the adolescent’s unique social world.

Psychological experiments have shown that
efficacy expectations affect the types of goals
people set for themselves, the effort they expend
to achieve those goals, and their persistence in
pursuing their goals in the face of obstacles
(Maddux 1995:12). Translated to the social
worlds of adolescents in urban neighborhoods, these findings lead to the hypothesis that adolescents with high street efficacy are more likely to expend greater effort and creativity to avoid violent confrontations, selecting social settings, peer groups, and activities that provide them a better chance of doing so. For instance, a young man intent on avoiding gang members in his neighborhood may seek out after-school activities or organized sports leagues instead of hanging out on the street corner or the playground when school lets out, or he might develop a verbal script designed to defuse the potential for conflict in situations wherein he is verbally confronted or insulted.

I hypothesize that adolescents with high levels of street efficacy are more likely to select environments that reduce the potential for violent confrontations. Because the selected environment is unique to each child and encompasses many different aspects of a child’s day-to-day life, it is difficult to operationalize fully with survey data. However, it is possible to develop several measures that may serve as indicators of the potential for violence in the child’s everyday environments. The theoretical perspective I outline suggests that the strength of an adolescent’s commitment to avoiding violence is reflected in his choices about the types of peers with whom he surrounds himself, the types of situations and social settings into which he places himself, and his willingness to resort to violence. Accordingly, adolescents with high street efficacy should exhibit lower levels of violence, should have relatively few delinquent peers, and should spend less time in unstructured activities shown to be associated with individual deviant behavior (Birkbeck and LaFree 1993; Osgood et al. 1996).

There are numerous examples of these processes at work in ethnographic studies of adolescents in disadvantaged urban neighborhoods, yet none of these studies have advanced a full theory to distinguish the ways that adolescents respond to potentially violent environments (Anderson 1999; Irwin 2004; Jones 2004). In particular, Anderson provides several case studies that bring into focus the crucial distinctions in the ways that young people perceive and respond to the threat of violence in their social environment (see the case studies of “Robert” [pp. 290–310] and “Tyree” [pp. 80–103] in Anderson 1999). Anderson describes how some subjects consider violence to be their only possible response to threats or perceived challenges, whereas others in similar environments use multiple strategies to resolve their problems while avoiding a violent confrontation.

Although Anderson does not provide a full theory to explain this variation, he does highlight certain factors that help explain adolescents’ responses to dangerous environments. First, primary emphasis is placed on the importance of a “decent” family as a buffer against the pressures of the street (Anderson 1999; Warr 2004). Anderson (1990:3–4; 1999:145–146) also points to the presence of “old heads” and “community mothers” in the neighborhood (i.e., older men and women willing to offer their advice to youngsters) as potentially influential role models who may inspire a commitment to mainstream ideals among young men and women in urban ghettos. Despite the emphasis on the importance of a decent family, Anderson’s fieldwork demonstrates that even children from decent families often adapt to the code of the street (Anderson 1999:99), and many examples of adolescents who fall prey to the violence in their social environment are from families that Anderson would most likely characterize as decent. This evidence suggests that it is essential to understand the mechanisms by which family members and neighborhood role models influence young adults in disadvantaged environments, leading some to select environments characterized by violence, but others to maintain a commitment to avoiding violence.

Second, Anderson (1999:66) conceptualizes violent social networks and strategic exhibitions of violent behavior as forms of “capital” that adolescents use to maintain “respect” while avoiding physical attacks in dangerous settings. According to this argument, it often is necessary for youth living in violent environments to make clear a willingness to resort to violence and to “run with” friends who command respect on the street to deter potential attackers (1999:72). Massey (1995) draws on this argument, but is more direct, contending that violent behavior should be seen as a rational “adaptation” to violent environments that provides protection for adolescents. For instance, Massey (1995:1216) writes:

How does a person adapt to a harsh environment where violence is endemic, the odds of criminal
victimization are high, and the risk of death or injury substantial? The most logical individual adaptation is for one to become violent oneself. By adopting a threatening demeanor, cultivating a reputation for the use of force, and selectively backing up that reputation with actual violence, one can deter potential criminals and increase the odds of survival.

Although my analysis is not designed to provide a precise test of these arguments, it does shed light on the relationship between violent behavior, peer delinquency, and adolescents’ perceptions of their ability to avoid violence. By examining these relationships, it is possible to test whether youth who exhibit violent behavior or those who associate with delinquent peers feel more or less confident in their ability to engage in public life within their neighborhood safely. More generally, the theoretical diagram shown in Figure 1 expands upon several arguments and observations in *Code of the Street* (Anderson 1999) and incorporates them into a formal theory designed to explain variation in adolescents’ responses to potentially dangerous environments.

**DATA**

I use data from the Project on Human Development in Chicago Neighborhoods (PHDCN), a longitudinal study of children and families living in a diverse set of Chicago neighborhoods in 1995 (Earls et al. 1994; Earls et al. 1995). The PHDCN sampling design involved two stages. First, all 343 Chicago neighborhood clusters (NCs) were stratified by racial/ethnic composition and socioeconomic status, and a random sample of NCs was selected within strata (see Sampson et al. [1997] for a description of the construction of the 343 NCs). Second, dwelling units were listed within each NC. All households were listed, and age-eligible participants (household members within 12 months of age 0, 3, 6, 9, 12, 15, or 18 years) were selected with certainty. Respondents and their caregivers were interviewed up to three times between 1995 and 2002.

The current analysis limits the sample to include only members of the 9-, 12-, and 15-year-old cohorts and their caregivers. For all subject- and family-level variables, I use a multiple imputation procedure suggested in van Buuren (1999) and implemented by Royston (2004) to impute missing values (see Allison [2001] for a full description of multiple imputation). This procedure is used to impute values for individuals who are interviewed but do not provide information on a given question, as well as for individuals who leave the survey over the three-wave period. The method relies on the assumption that the data are missing at random, or that the probability of having missing data on a given variable is unrelated to the true value of that variable (Allison 2001; Rubin 1987; Schafer 1999). Procedures available in the HLM software (Raudenbush et al. 2001) are used to estimate multilevel models with multiply imputed data that fully account for the loss of precision associated with imputation of values. The relevant sample for all regression models consists of 2,337 adolescent boys and girls and their caregivers living in 80 neighborhood clusters across Chicago. Descriptive statistics for key variables are displayed in Table 1.

**The Measure of Street Efficacy**

It is generally accepted that efficacy expectations “should be defined and measured in the context of relatively specific behaviors in specific situations or contexts” (Maddux 1995:8). Although in some circumstances a sense of efficacy in one area may extend to other areas of behavior or other situations, the extent to which this occurs depends largely on the similarity of the skills and behaviors necessary to achieve the outcome of interest in each situation (Bandura 1997:51; Maddux 1995:8–9). However, efficacy theorists argue against the use of generalized scales developed to generate global measures of self-efficacy because these types of global measures usually are poor predictors of behavior, and because they imply that self-efficacy should be conceptualized as a general personality trait (Bandura 1997:47–50). Consistent with this approach, a measure of _street efficacy_ is constructed that represents the mean value over five survey items measuring adolescents’ per-

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3 For all survey items measuring violent behavior, I use original values because the imputations produced in the multiple imputation procedure were not compatible with the assumptions of the Rasch model that is estimated. The Rasch model requires that each item in the scale be equally discriminating, an assumption that was not supported for certain sets of imputations.
ceptions of their ability to avoid violent confrontations and find ways to be safe in their neighborhoods.4

For each survey item, respondents were asked to evaluate two statements and determine which statement was a more accurate description of how they felt in their neighborhood (see the online supplement for the survey items). They then were asked to decide whether the selected statement was “very true” or “sort of true.” These items follow Bandura’s prescriptions for the measurement of self-efficacy in that they incorporate both the level and the strength of efficacy expectations (Bandura 1997:42–46). The resulting scale ranges from 1 to 4, representing the mean value of responses to the five sets of statements, and recoded so that high values indicate high efficacy.

### Indicators of Violent Environments

Several measures are constructed to provide a description of the potential for violence in adolescents’ selected environments. In particular, I focus on adolescent violent behavior, peer delinquency, and routine activities as indicators for the types of environments into which adolescents select. Although much research attempts to identify the causal relationships among these different aspects of the selected environment (e.g., the effects of delinquent peers or routine activities on violence) (Matsueda and Anderson 1998; Osgood et al. 1996), it is very likely that the paths of causation are bidirectional. I avoid the problem of trying to identify causal relationships among these indicators by treating violence, peer associations, and routine activities as outcomes and as elements of the larger

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4 See the online supplement for a more detailed description of the street efficacy scale, including the specific items comprising the scale of street efficacy and other key variables. The individual items produce a scale with a reliability of $\alpha = .56$ at Wave 2 and $\alpha = .62$ at Wave 3. Because the reliability of the scale is relatively low, I conduct all analyses on each individual item in the scale of street efficacy as well as the composite measure. I find that the results are extremely consistent across the items in the scale, although I report the few substantive differences found when the individual items are used in notes throughout the text.
theoretical concept of the selected environment.\footnote{A comprehensive portrait of the selected environment would need to consider at least four dimensions: (1) people, (2) behavior, (3) activities, and (4) places. My measures consider the first three dimensions. The physical geography of adolescents' everyday lives is another important dimension of the selected environment, but information pertaining to the actual locations where adolescents spend their time is not available through the Project on Human Development in Chicago Neighborhoods.}

Individual violent behavior is measured with self-reported responses to multiple survey items. Subjects were asked whether they had committed any of 12 violent acts in the year before the interview. Each dichotomous item is incorporated into a scale of violent behavior, as described in the “Results” section later. A summary measure of violent behavior also is constructed and used as a control variable in certain models. This measure represents the number of violent activities in which the subject has participated during the reference period. Previous research has shown that self-reported survey items are reliable indicators of criminal or violent behavior (Thornberry and Krohn 2002).

Peer delinquency is measured as the mean value of responses to several survey items asking subjects about delinquent activities of their friends ($\alpha = .78$) (Huizinga, Esbenson, and Weihar 1991). In addition to violent behavior and peer associations, the routine activities that occupy the adolescent’s everyday life represent a third component of the selected environment. Although the analysis of routine activities is most often used to explain aggregate rates of crime and violence (Birkbeck and LaFree 1993; Cohen and Felson 1979), Osgood et al. (1996) find evidence that certain forms of “unstructured socializing” also predict individual delinquency. I focus on a set of unstructured activities shown to be associated with individual crime or deviant behavior ($\alpha = .65$).

**MEASURES OF THE IMPOSED NEIGHBORHOOD ENVIRONMENT**

A measure of neighborhood concentrated disadvantage is based on five variables constructed from the 1990 decennial census: the rates of poverty, the receipt of public assistance, unemployment, female-headed households, and the density of children (see Sampson et al. [1997] for a detailed description of this scale). Sampson et al. (1997) show this measure to be correlated strongly with victimization rates and homicides.

Measures of neighborhood collective efficacy and neighborhood violence are constructed with data from the PHDCN Community Survey (Earls et al. 1995). The Community Survey is an independent survey of 8,782 Chicago residents in all 343 neighborhood clusters in Chicago. Collected in 1995, data from the Community Survey are both temporally prior to and distinct from data collected in the Longitudinal Cohort Study, the survey administered to subject participants and their caregivers. Collective efficacy is based on a series of survey items asking about the extent of informal social control and social cohesion/trust in respondents’ neighborhoods. Sampson et al. (1997) show the scale to be a strong predictor of neighborhood-level violence as well as individual victimization. Neighborhood violence, a scale measuring residents’ perceptions about the frequency of various violent events in the neighborhood, is included to provide a measure for the general level of violence in adolescents’ neighborhoods.

**INDIVIDUAL AND FAMILY FACTORS RELATED TO VIOLENCE**

Several additional variables are included in regression models to capture theoretically relevant characteristics of children and families, as well as adolescents’ experiences with violence. The subject’s verbal ability is measured with a composite scale based on the results from two tests given to subjects: the Wechsler Intelligence Scale for Children vocabulary test (Wechsler 1974) and the Wide Range Achievement Test, which measures reading ability (Wilkinson 1993). The subject’s impulsivity represents the mean of several standardized responses to questions asked of the caregiver from the Achenbach Child Behavior Checklist ($\alpha = .76$) (Achenbach 1993). The measures of both verbal ability and impulsivity are shown to be associated with individual violent behavior by Sampson et al. (2005).
Parental supervision represents the mean of a subset of standardized responses to survey items from the PHDCN Homelife Interview (Leventhal et al. 2004). Caregivers were asked a set of questions about their involvement in various aspects of the child’s life (e.g., knowledge of friends, school activities) and the extent to which they monitor and enforce rules for the child (e.g., curfew, unsupervised time) \((\alpha = .70)\). Similar measures of parental monitoring or supervision have been shown to be strong predictors of violence and delinquency (Farrington 1995; Sampson and Lauritsen 1993:26). Family criminality represents the total number of family members identified by the caregiver as having a criminal record. Domestic violence is measured as the sum of dichotomous responses to nine survey items asking caregivers about interactions with any current or previous domestic partner \((\alpha = .84)\). The validity of the scale is supported in Straus et al. (1996). The inclusion of the measures of family criminality and domestic violence is based on a body of research identifying criminality among family members and violence occurring within the home as important predictors of child delinquency (Farrington 1998). These measures also allow for an examination of the effects that violent “models” have on adolescents’ perceptions of their ability to avoid violence.

The subject’s exposure to violence is the sum of dichotomous responses to survey items asking the subject whether he or she witnessed any of several violent acts during the year before the interview \((\alpha = .71)\), and victimization is the sum of dichotomous responses to items asking the subject about any physical assaults or serious threats of physical harm over the same period \((\alpha = .55)\). Evidence of construct validity for the two scales is provided in Selner-O’Hagan et al. (1998). Because exposure to violence and personal victimization may affect street efficacy through two distinct pathways (“modeling” processes in the case of exposure to violence and processes of “performance” in the case of victimization), I include them in empirical models separately instead of incorporating the two constructs into a single scale.

I also construct dichotomous measures of individual alcohol use and marijuana use on the basis of research linking substance use with violence (Kodjo, Auinger, and Ryan 2004; Miczek et al. 1993). These measures represent the dichotomous responses to questions asked of subjects about whether they had ever drunk alcohol (“not just a sip or taste”) or smoked marijuana in the year before the interview. The measure of school violence is a scale based on seven questions asked of the subject about gang activity, racial/ethnic problems, prevalence of school fights, and other indicators of violence (e.g., metal detectors in the school) in the school environment \((\alpha = .66)\).

Certain models control for a set of demographic characteristics of the subject and caregiver, as well as for several dimensions of family background and socioeconomic status. See the online supplement to this article for detailed descriptions of all variables.

RESULTS

The Diverse Sources of Street Efficacy

In the initial series of models, street efficacy is the dependent variable, and individual respondents are nested within neighborhoods (Bryk and Raudenbush 1992). In the Level 2, or neighborhood-level models, measures of concentrated disadvantage, neighborhood violence, and collective efficacy predict variation in street efficacy across neighborhoods in Chicago. In the Level 1, or person-level, models, individual- and family-level measures predict variation in individual street efficacy within neighborhoods. In all models, the independent variables are measured at Wave 1 of the survey, whereas street efficacy is measured at Wave 2. Results are presented in Table 2.

In Model 1, I examine the sources of variation in street efficacy across neighborhoods by incorporating measures of concentrated disadvantage, collective efficacy, and perceived violence into the neighborhood-level model. The three neighborhood-level variables in this model

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6 As with all models in the analysis, all continuous variables, including the neighborhood-level measures, are centered around their grand means. Dichotomous and categorical variables are left uncentered.

7 Personal victimization and exposure to violence are measured at Wave 2. Because these variables represent victimization or exposure in the year before the interview, they can be thought of as temporally prior to the outcome.
Table 2. Models of Street Efficacy

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<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
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<td><strong>Neighborhood-level Model</strong></td>
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<td>Intercept</td>
<td>3.106 ***</td>
<td>3.246 ***</td>
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<td></td>
<td>(.015)</td>
<td>(.056)</td>
<td>(.058)</td>
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<td>-.058 **</td>
<td>-.039</td>
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<td>(.027)</td>
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<td>.147 **</td>
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<td>.109 ***</td>
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<td></td>
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<td>(.010)</td>
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<td>-.043</td>
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<td>(.026)</td>
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<td>(.014)</td>
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<td>Peer delinquency</td>
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<td></td>
<td>(.043)</td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td>(.013)</td>
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<td>-.167 **</td>
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<td>(.063)</td>
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<td>-.108 *</td>
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<td>(.064)</td>
<td>(.065)</td>
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<td>(.076)</td>
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<td></td>
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<td>(.043)</td>
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<td>(.053)</td>
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<td>(.034)</td>
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<tr>
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<td>.043 ***</td>
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<tr>
<td></td>
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<td>(.008)</td>
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<tr>
<td>Subject’s gender, 1 = male</td>
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<tr>
<td></td>
<td>(.031)</td>
<td>(.030)</td>
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</table>

*Note: Standard errors in parentheses; additional control variables included in Models 2 and 3 are: caregiver’s age and gender, caregiver’s total household income, education, and marital status, caregiver’s (and spouse’s) employment and occupational status, caregiver’s welfare receipt, total household size, home ownership, length of residence at current address, and subject’s body mass index.

* p < .1; ** p < .05; *** p < .01
explain 75 percent of the variation in street efficacy across neighborhoods, indicating that these three measures capture most of the key differences between neighborhoods. I find that both concentrated disadvantage and collective efficacy are significantly associated with street efficacy. Adolescents in disadvantaged neighborhoods are less likely to be confident in their ability to avoid violence, whereas those who live among neighbors who take an active role in enforcing common norms of behavior and maintaining social controls have relatively high street efficacy. Interestingly, this model seems to imply that the perceived presence of violence in one’s neighborhood is less important than other dimensions of disadvantage, and also less important than the role that the community plays in regulating public activity and enforcing common social norms.

Model 2 introduces a set of demographic and family background variables along with several variables representing characteristics of individuals or families that are associated with violence. Results from theoretically relevant variables are shown in Table 2. I find that verbal ability and impulsivity are associated with street efficacy in the expected directions, suggesting that adolescents are differentially equipped with skills that help them avoid conflict on the street. Older adolescents are more confident in their ability to avoid violence, whereas those who have used marijuana in the past year are less confident. Children of Mexican and Puerto Rican descent also have relatively low levels of street efficacy. Adolescents with parents who supervise them closely are more likely to be confident in their ability to avoid violence, although family criminality and domestic violence have no effects in this model. The inclusion of these covariates accounts for a portion of the association between the neighborhood-level variables and street efficacy, although both neighborhood concentrated disadvantage and collective efficacy remain significant predictors in this model.

In Model 3, I include measures of personal victimization, exposure to violence, prior violent behavior, and peer delinquency to determine whether the association between neighborhood-level factors and individual street efficacy is explained by personal experiences with violence. I find that adolescents who have been exposed to violence, those who engage in violent behavior, and those with delinquent friends have lower levels of street efficacy. The measure of concentrated disadvantage is no longer significant in this model, suggesting that the association between neighborhood disadvantage and street efficacy is largely explained by individual experiences with violence and the set of control variables included in the model. However, collective efficacy remains a significant predictor in this model.

Although the results from Model 3 suggest no gender differences in the level of street efficacy, it still might be the case that the sources of street efficacy are different for boys and girls. For instance, although ethnographers suggest that the threat of violence in urban neighborhoods is becoming more similar between boys and girls (Anderson 1999; Jones 2004), a body of evidence shows substantial, persistent gender gaps in the prevalence of violence (Kruttschnitt 1993). Considering the mixed results from research examining the link between neighborhood-level factors and individual street efficacy, it is important to consider the role of personal experiences with violence, family background, and social norms in shaping adolescent perceptions of their ability to avoid violence in their neighborhood.

---

8 The proportion of explained Level 2 variance is obtained by first estimating an unconditional model with no predictors at the neighborhood or individual level. In the unconditional model, about 6 percent of the variation in street efficacy occurs between neighborhoods. I subtract the Level 2 variance component in Model 1 from the Level 2 component in the unconditional model, and divide this difference by the variance component in the unconditional model to obtain the proportion of Level 2 variance explained.

9 To determine whether this finding is attributable to a deficient measure of neighborhood violence, I replicate the model using a measure of the prevalence of homicides in the neighborhood instead of the measure of perceived violence in the neighborhood. The homicide measure uses aggregated counts of homicides in each neighborhood from 1990 to 1995 available from the Chicago Homicide Dataset (Block and Block 1993). The results (available from the author) match those reported in Model 1, Table 2.

10 In separate models not shown, I replicate these analyses using each individual item in the scale of street efficacy as an outcome. The results are extremely consistent across the items, with the exception of the item asking adolescents whether they can find ways to be safe when alone in their neighborhood (in which concentrated disadvantage has a larger effect than collective efficacy).
between gender and violence, I estimate the same model separately for boys and girls to determine whether the sources of street efficacy vary by gender (results are shown in Table S2 of the online supplement). I find minimal gender differences. Adolescent boys living in violent homes and those subjected to victimization have lower levels of street efficacy. These measures have no effects for girls. On the other hand, impulsivity seems to reduce street efficacy among girls, but not among boys. Although other coefficients in the model have slightly different magnitudes for boys and girls, none of the other coefficients in the model vary significantly by gender.

As a whole, the results from this first set of models provide strong evidence that adolescents’ confidence in their ability to avoid violence is substantially influenced by their social context. Although individual characteristics such as impulsivity and strong verbal ability do affect street efficacy, several aspects of the adolescent’s environment both in and outside the home also play a large role in influencing how children think about the potential for violence in their lives. Especially interesting from a theoretical standpoint is the robust relationship between neighborhood collective efficacy and individual street efficacy. This result suggests that adolescents’ perceptions about their own ability to avoid violence are not based solely on the presence of disadvantage or violence in their neighborhood, but rather on the role that the community takes in responding to the potential for violence and in enforcing common norms of behavior.

Finally, these models present a complicated picture of the relationship between prior violent behavior, delinquent social networks, and adolescents’ perceptions of their ability to avoid violence. Both Anderson (1999) and Massey (1995) argue that individuals in disadvantaged environments use violence and violent social networks strategically in an effort to maintain status on the street and to ward off potential attackers. My models do not test this hypothesis directly, but my results do suggest that frequent prior violent behavior and association with delinquent peers should not be regarded as protective for adolescents. One potential explanation for this finding is that Anderson’s and Massey’s arguments are applicable in only the most violent neighborhoods within the city. I test this possibility by estimating Model 3 after limiting the sample to include only respondents who live in extremely violent neighborhoods. I find that prior violent behavior has only a weak association with street efficacy in the most disadvantaged neighborhoods, although peer delinquency continues to be negatively associated with street efficacy.

When these results are interpreted, it should be kept in mind that my measures of violence and peer delinquency may be too blunt to capture the nuances of the ways that youth use violence and violent social networks to ward off potential attackers. However, these results make clear that across all neighborhoods in Chicago, adolescents who have taken part in violent activities and who have formed affiliations with delinquent peers find themselves less confident in their ability to avoid violence and to be safe in their neighborhood. This result is consistent with the body of research showing that violent offending is a strong predictor of violent victimization (Lauritsen, Sampson, and Laub 1991; Sampson and Lauritsen 1993:30–34). Within the most violent neighborhoods, having delinquent peers continues to be associated with low street efficacy, whereas violent behavior has no effect. Collectively, this set of findings should motivate future research designed to clarify the relationship between violent behavior, violent social networks, and adolescents’ perceived physical safety, and to provide a more precise test of Anderson’s and Massey’s arguments than is possible in the current analysis.

### STREET EFFICACY AND VIOLENT ENVIRONMENTS

I now turn to the relationship between adolescents’ perceptions of their ability to avoid violence and the types of environments they select.

---

11 I test for differences in the coefficients between boys and girls by estimating a fully interacted model in which all independent variables in the model are interacted with gender.

12 Specifically, I split the sample into thirds based on the level of perceived violence in the neighborhood, keeping only adolescents who live in the most violent neighborhoods in Chicago.
for themselves. I begin by analyzing the relationship between street efficacy and violence in a series of three-level logistic hierarchical models. In recent articles, multiple authors have made convincing cases for the use of item response theory as a way to model individual violence or crime using items from surveys of self-reported delinquency or violence (Osgood, McMorris, and Potenza 2002; Raudenbush, Johnson, and Sampson 2003; Sampson et al. 2005). I follow closely the methodology of Raudenbush et al. (2003) in applying a multi-level Rasch model to the study of individual violence. This model allows one to incorporate individual, family, and neighborhood variables into models predicting individual violence, while taking into account the relative frequency of certain violent acts as compared with others, and the dependence of responses due to clustering of items within respondents and respondents within neighborhoods (Bryk and Raudenbush 1992; Sampson et al. 2005).

I estimate a three-level model in which individual survey items are incorporated into a scale of violence at Level 1. In the person-level model, characteristics of individual subjects and their families are used to predict individual violence within neighborhoods, whereas in the neighborhood-level model, measures of concentrated disadvantage, collective efficacy, and perceived neighborhood violence are again used to predict variation in individual violence across neighborhoods in Chicago (see Raudenbush et al. [2003] for a detailed description of the structure of the three-level model of violence). All individual- and neighborhood-level variables are measured at Wave 1 of the survey, with the exception of street efficacy, the mediating variable, which is measured at Wave 2. Items comprising the scale of violence are measured at Wave 3 to ensure proper temporal ordering.

In the first model (Table 3, Model 1), only the neighborhood-level measures are included as predictors. I find a positive and significant association between concentrated disadvantage and individual violence, but collective efficacy and neighborhood violence are not associated with individual violence. Model 2 introduces the measure of street efficacy to test whether this variable mediates the association between neighborhood disadvantage and violence. In accordance with my hypothesis, I find that adolescents with high levels of street efficacy are less likely to exhibit violent behavior. However, street efficacy only partially mediates the association between neighborhood disadvantage and individual violence.

In Model 3, I include a set of demographic and family background variables to the person-level model. I find that adolescents from homes with domestic violence or with family members involved in the criminal justice system are more likely to exhibit violent behavior, as are those who have used alcohol or marijuana. Results not shown in Table 3 show that boys are more likely to be involved in violence than girls in the sample, as are older adolescents and African American sample members. First- and second-generation immigrants are less likely to exhibit violent behavior than subjects whose parents were born in the United States. Although the inclusion of these controls accounts for a large portion of the association between neighborhood disadvantage and individual violence, these variables account for only a small portion of the association between street efficacy and violence.

The most serious threat to these results is the possibility that unmeasured characteristics of adolescents are biasing the results, or that there are reciprocal effects of violence on street efficacy that are not picked up in the models. I attempt to address each of these possibilities by including a measure of violence from Wave 1 of the survey as a control variable in Model 4. This specification can be thought of as an attempt to control both for the effects of past violent behavior on future violence and for any unmeasured tendencies toward violence that are present by Wave 1 of the survey. The results from Model 4 show that adolescents with high street efficacy remain significantly less likely to engage in violent behavior even after controlling for prior violence.

---

13 Results from the Level 1 model show the relative severity of each survey item in the scale of individual violence, and are available from the author upon request.

14 In results not shown, I replicated models predicting individual violence using each individual item in the scale of street efficacy as predictors. The
Because of the possibility of bias attributable to unmeasured variables, my primary focus has been on providing evidence for the association between street efficacy and violence rather than on attempting to identify the magnitude of the association. However, the results in Table 3 do allow for a rough estimate of the magnitude of the relationship between street efficacy and violence. On the basis of odds ratios not reported in Table 3, the odds of exhibiting a given violent behavior are between .76 (using Model 3) and .85 (using Model 4) times as high for an adolescent who is "very" confident in his or her ability to avoid violence at Wave 2 than for an adolescent who is "sort of" confident. Considering the fact that estimated effects of each individual item on violence were generally smaller than the composite measure, and were not always significant using the specification in Model 4. I also estimated a model in which street efficacy is centered around the neighborhood-level mean rather than the grand mean. The purpose of this analysis is to determine whether adolescents within the same neighborhood who have relatively high levels of street efficacy are less likely to behave violently. The effects of street efficacy are found to be very slightly smaller when examined within neighborhoods.

### Table 3. Models of Violent Behavior

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Intercept</td>
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<td>−1.632 ***</td>
<td>−1.973 ***</td>
<td>−1.981 ***</td>
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<tr>
<td></td>
<td>(.065)</td>
<td>(.066)</td>
<td>(.226)</td>
<td>(.239)</td>
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<td>.447 ***</td>
<td>.155 **</td>
<td>.096</td>
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<tr>
<td></td>
<td>(.088)</td>
<td>(.090)</td>
<td>(.078)</td>
<td>(.072)</td>
</tr>
<tr>
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<td>.297</td>
<td>.052</td>
<td>.066</td>
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<tr>
<td></td>
<td>(.276)</td>
<td>(.271)</td>
<td>(.294)</td>
<td>(.315)</td>
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<td>−.376</td>
<td>−.292</td>
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<tr>
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<td>(.271)</td>
<td>(.247)</td>
<td>(.259)</td>
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<tr>
<td>Person-level Model</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Street efficacy</td>
<td>−.313 ***</td>
<td>−.272 ***</td>
<td>−.166 *</td>
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<td>(.086)</td>
<td>(.093)</td>
<td>(.089)</td>
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<td>Parental supervision</td>
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<td>(.152)</td>
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<td>.066 ***</td>
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<td>(.026)</td>
<td>(.023)</td>
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<td>Family criminality</td>
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<td>.073 ***</td>
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<td>Marijuana use</td>
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<td>(.038)</td>
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*Note: Standard errors in parentheses; level 1 item severities are excluded from the table of results, but are available from the author upon request; additional control variables included in Models 3 and 4 are: subject’s race/ethnicity, age, gender, and immigration status, caregiver’s age and gender, caregiver’s total household income, education, and marital status, caregiver’s (and spouse’s) employment and occupational status, caregiver’s welfare receipt, total household size, home ownership, length of residence at current address, and subject’s body mass index.

* p < .1; ** p < .05; *** p < .01

15 The difference between an adolescent who is “very” confident and one who is “sort of” confident in his or her ability to avoid violence is equivalent to a one-unit reduction in the scale of street efficacy.
I am using a Wave 2 measure of street efficacy to predict violence at Wave 3 of the survey; these estimates are conservative. In models not shown, using a measure of street efficacy from Wave 3 of the survey, I find that the estimated association between street efficacy and violence is much stronger.

**Peer Delinquency and Unstructured Activities**

I estimate models of peer delinquency and unstructured activities using two-level hierarchical linear models in which the neighborhood-level measures predict variation in each outcome across neighborhoods, and individual and family-level characteristics of subjects predict variation within neighborhoods. Results for selected models predicting both peer delinquency and unstructured activities are presented in Table 4. The full progression of models for each outcome is available in Tables S3 and S4 of the online supplement that accompanies this article.

In accordance with my hypothesis, the results in Model 1, Table 4 show that adolescents with high street efficacy are less likely to select peers who are involved in various delinquent activities. I also find that the associations between each of the neighborhood-level variables and

### Table 4. Selected Models of Peer Delinquency and Unstructured Activities

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<tr>
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<th>Peer Delinquency</th>
<th>Unstructured Activities</th>
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<tbody>
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<td></td>
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<td>Model 2</td>
</tr>
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<tr>
<td>Intercept</td>
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<td>1.789 ***</td>
</tr>
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<td>(.077)</td>
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<td>Concentrated disadvantage</td>
<td>.038</td>
<td>–.013</td>
</tr>
<tr>
<td></td>
<td>(.027)</td>
<td>(.034)</td>
</tr>
<tr>
<td>Collective efficacy</td>
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<td>.027</td>
</tr>
<tr>
<td></td>
<td>(.109)</td>
<td>(.100)</td>
</tr>
<tr>
<td>Neighborhood violence</td>
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<td>.012</td>
</tr>
<tr>
<td></td>
<td>(.075)</td>
<td>(.071)</td>
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<tr>
<td>Person-level Model</td>
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<td></td>
</tr>
<tr>
<td>Street efficacy</td>
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<td>–.062 **</td>
</tr>
<tr>
<td></td>
<td>(.024)</td>
<td>(.022)</td>
</tr>
<tr>
<td>Verbal ability</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(.011)</td>
<td></td>
</tr>
<tr>
<td>Impulsivity</td>
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<tr>
<td></td>
<td>(.017)</td>
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<tr>
<td>Parental supervision</td>
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<td>Domestic violence</td>
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<tr>
<td></td>
<td>(.012)</td>
<td></td>
</tr>
<tr>
<td>Marijuana use</td>
<td>.047</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.066)</td>
<td></td>
</tr>
<tr>
<td>Alcohol use</td>
<td>.028</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.047)</td>
<td></td>
</tr>
<tr>
<td>School violence</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.020)</td>
<td></td>
</tr>
<tr>
<td>Peer delinquency—wave 1</td>
<td></td>
<td>.260 ***</td>
</tr>
<tr>
<td></td>
<td>(.046)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Standard errors in parentheses; additional control variables included in Model 2 and Model 4 are: subject’s race/ethnicity, age, gender, and immigration status, caregiver’s age and gender, caregiver’s total household income, education, and marital status, caregiver’s (and spouse’s) employment and occupational status, caregiver’s welfare receipt, total household size, home ownership, length of residence at current address, and subject’s body mass index.

* p < .1; ** p < .05; *** p < .01
peer delinquency are not significant in this model. As with the models of individual violence, however, unmeasured characteristics of adolescents may be biasing these results. Model 2 shows results from the full specification, in which the set of individual and family controls are added to the model, along with a lagged measure of peer delinquency from Wave 1 of the survey. I find that family criminality and domestic violence in the home are positively associated with peer delinquency. Street efficacy maintains a significant negative association with peer delinquency even after a lagged measure of peer delinquency is included in the model.16

The magnitude of the association between street efficacy and peer delinquency is relatively small from a substantive standpoint. For instance, a one-unit increase in street efficacy (e.g., moving from “sort of” confident to “very” confident) is associated with a reduction in the peer delinquency scale of about .06 units (using results from Model 2) to .08 units (using results from Model 3 in Table S3 in the online supplement), in which a one-unit reduction in the peer delinquency scale would mean adolescents report that “some” of their friends take part in delinquent activities, as opposed to “all of them.” However, in models not shown, I use a measure of street efficacy from Wave 3 of the survey to estimate peer delinquency at Wave 3, and I find that the estimated association is substantially larger.

Unlike violent behavior and peer delinquency, I find that street efficacy has no effect on the routine activities that occupy adolescents’ everyday lives. This is true in models using a composite scale of “unstructured activities” as an outcome, and also in models using each of the individual items in the scale of unstructured activities as outcomes. The absence of a relationship between street efficacy and routine activities can be interpreted in multiple ways. One possibility is that adolescents’ confidence in their ability to avoid violence simply has no effect on the types of activities in which they take part, which would run counter to my hypothesis.

A second possibility is that these measures of unstructured activities are not capturing the potential for violence in adolescents’ everyday lives. For instance, a young woman who indicates that she spends a substantial amount of time hanging out with friends may not necessarily be spending her time in unsafe environments. The potential for violence depends on the types of friends with whom she spends time, the places they go, and the way they carry themselves in those places. These types of factors may not be captured in the items used to measure routine activities.

A third possibility is that adolescents with high street efficacy may be better equipped to handle unstructured or unsupervised activities, thus mitigating the potential for violence in such environments. Indeed, these results may indicate that youth who are confident in their ability to avoid violence do not retreat from public life to avoid violence, but rather play an active role in their communities while still effectively managing potentially violent situations. None of these interpretations can be validated with survey data, however. Instead, ethnographic work may well be necessary to develop a rich picture of the ways that adolescents with varying levels of street efficacy engage in public life and manage the potential for violence.

**Summary**

Although street efficacy has no detectable relationship with the routine activities of adolescents, I find evidence suggesting that adolescents who are confident in their ability to avoid violence are less likely to resort to violence themselves or to surround themselves with delinquent peers. I also find that the relationship between neighborhoods, street efficacy, and the selected environment appears to be

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16 In results not shown, I replicated these models using each individual item in the scale of street efficacy to predict peer delinquency rather than the composite measure. The results were extremely similar across items, although the effect size varied. The item asking whether adolescents can find ways to be safe within a few blocks of their home was the only one not significantly associated with peer delinquency in Model 2. I also estimated models in which street efficacy is centered around the neighborhood-level mean rather than the grand mean to determine whether variation in street efficacy occurring within neighborhoods leads to significant differences in peer delinquency. The relationship between street efficacy and peer delinquency is essentially unchanged in these models.
more complicated than the diagram outlined in Figure 1 would suggest. Specifically, although neighborhood concentrated disadvantage is strongly associated with individual violence, street efficacy does not mediate this association. Furthermore, the various aspects of the neighborhood environment have minimal effects on unstructured activities and peer delinquency.

These results make more sense if we consider the tremendous heterogeneity among adolescents living within similar neighborhood environments. For instance, in the models predicting street efficacy, I find that only 6 percent of the variation in street efficacy occurs between neighborhoods, leaving 94 percent of the variation within neighborhoods. This does not mean that the neighborhood environment is unimportant in explaining adolescents’ confidence in their ability to avoid violence—as we have seen, collective efficacy has a strong and robust relationship with street efficacy—but rather, that characteristics of the neighborhood represent only one of multiple factors that influence how children interpret and respond to their environment. Evidence of the diverse sources of street efficacy reinforces the idea that adolescents are not simply passive recipients of the neighborhood environment. Instead, various characteristics of the child, his family, and his community combine to influence that child’s confidence in his ability to engage in public life while avoiding violence. In turn, the strength of an adolescent’s confidence appears to play an important role in influencing the character of the child’s selected environment.

In summarizing these results, I again point out that my empirical models are limited in several ways. The most serious threats to my findings are the possibilities that unmeasured characteristics of adolescents are biasing my results and that there may be reciprocal effects of violence and peer delinquency on street efficacy that are not picked up in my models. I attempt to address each of these possibilities by estimating the association between street efficacy measured at Wave 2 and social outcomes measured at Wave 3 to ensure proper temporal ordering, and by including lagged measures of violence and peer delinquency as control variables in the final models predicting each outcome. The results are found to be robust in these conservative models. Still, I am reluctant to claim a causal relationship between street efficacy and either outcome without additional tests of the theoretical model using alternative methods in contexts other than Chicago. Experimental evaluations of programs that use psychological treatments to manipulate efficacy expectations may ultimately be necessary to demonstrate a causal effect.

**DISCUSSION**

Results from the various sets of models provide support for a theoretical reconceptualization of the ways that social contexts, particularly neighborhoods, influence adolescent behavior. At the heart of this reconceptualization is the recognition that adolescents make choices which influence their developmental trajectories. Although these choices may be influenced by their social context, they are not determined by it. This idea is captured in the conceptual distinction between imposed and selected environments.

The street efficacy concept provides a theoretical mechanism necessary for connecting the imposed environment to the decisions that adolescents make as they create their own unique lived environments. The concept also underscores the point that disadvantaged urban neighborhoods form unique ecological contexts, creating a need for specific theoretical constructs suited for explaining social phenomena in such settings. In particular, my focus on street efficacy reflects the central role that interpersonal violence plays in the lives of youth living in the most distressed urban areas.

By developing a theory to explain the ways that the imposed neighborhood context influences adolescents’ beliefs about their ability to avoid violence, it becomes possible to confront the critique that in analyzing the effects of neighborhoods, one is essentially ignoring the agency of individuals. Indeed, my primary contention is that individual agency is essential to understanding the environments that adolescents create for themselves. However, the choices that adolescents make do not arise purely from within, but appear to be shaped at least in part by various aspects of the imposed social environment that surrounds them.

To help explain adolescents’ choices as they navigate potentially dangerous streets, I expand on Bandura’s project to remove self-efficacy theory from the controlled context of the exper-
mentual setting (1997), and I apply the theory to help explain variation in the way that adolescents respond to the potential for violence in the neighborhood environment. In doing so, I find strong evidence against the conception of efficacy as emerging and existing primarily within individuals or even within families. For instance, I find that adolescents exposed to violence are less confident in their ability to avoid violence, which helps to explain the association between concentrated disadvantage and individual street efficacy.

It is not only the presence of structural disadvantage that influences how adolescents think about the potential for violence in their neighborhood environment, but rather the way that the community functions to monitor and support local youth. Residents’ willingness and capacity to take an active role in regulating public interactions within a given neighborhood have been shown to have important effects on the types of activities that occur within communities (Sampson et al. 1997), but these results suggest that collective efficacy also may have an impact on processes of cognition occurring within adolescents in the neighborhood. Adolescents are more likely to believe that they can engage in public life while avoiding violence when neighborhood residents share a set of expectations regarding the collective oversight of local youth and the enforcement of common social norms (Sampson et al. 1999). A sense of confidence in one’s ability to avoid violence is, in turn, found to be related to the types of environments that adolescents carve out from what is available to them. In particular, I find that adolescents with high levels of street efficacy are less likely to resort to violence themselves or to associate with delinquent peers.

These findings provide preliminary support for a perspective on violence control that emphasizes individual agency, in which a sense of efficacy can be thought of as flowing from concerned citizens to communities to individual adolescents. This perspective needs to be tested empirically in contexts other than Chicago neighborhoods, but it represents a promising way to think about the role that individuals and collectivities play in controlling violence through informal sources and through individual efforts.

**Patrick T. Sharkey** is a Ph.D. candidate in the Department of Sociology and Social Policy at Harvard University. His research focuses on residential inequality in urban America and the consequences for adolescents. His dissertation research is aimed at understanding continuity and change in the neighborhood environments of different racial and ethnic groups in America over the life course and across generations.

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