ADOLESCENTS IN PUBLIC HOUSING

ADDRESSING PSYCHOLOGICAL AND BEHAVIORAL HEALTH

VON E. NEBBITT

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TO MY PARENTS

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FOREWORD

I HAVE SPENT NEARLY TWENTY YEARS working in public housing, mostly as executive director of the St. Louis Housing Authority. Over the years there have been many changes in public housing in my city. Gone are the derelict, isolated warehouses of poverty that once dominated the landscape. They have been replaced with the mixed-income communities that blend with the surrounding neighborhoods and reestablish the traditional street patterns. These communities reconstruct neighborhoods and reconnect residents with the surrounding communities. They attempt to reduce the isolation of public housing communities by breaking down the physical barriers of isolation that shout to all, "This is a public housing development."

Although the physical condition of public housing has dramatically improved, the challenges of working in public housing often make one reflect upon the reasons why there are not more effective methods to deal with the social issues that continue to plague many families that live in public housing. Even more perplexing is why some families have children who thrive and are very successful, whereas children in other families are destined to remain in poverty. I know a family with a single mother and three children who lived most of their lives in a severely distressed public housing development in a neighborhood with the highest level of poverty and crime in the city. Of the three children, one has an associate's degree, the second has a bachelor's degree and is pursuing a master's degree, and the third has a doctorate in pharmacological and physiological science. What makes these children thrive when their neighbor had a baby at the age of fifteen, never finished high school, and is destined to repeat the cycle of poverty?

This book's innovative approach to researching how the experience of living in public housing affects adolescent behavior seeks to answer these questions. This work does not approach the research by starting with only youth who demonstrate antisocial behavior but instead provides insight to the potential positive impacts of living in public housing. The authors suggest that the existing research expresses only the perception that all public housing is dangerous to children. By failing to recognize the new realities of life in public housing, the existing research does not explore other factors that influence the lives of youth in public housing. The research method here uses an integrated model that explores how the social context can inhibit or promote a community's ability to create safe environments.

The research results indicate that many factors contribute to the development of public housing youth. The study shows that community cohesion reduces the influence of other risk factors. The authors do not claim that their research is exhaustive but rather present the new model to encourage discussion and advocate for a unified model for future research. The authors also introduce the theoretical concepts of inorganic communities and the tropic cascading effect, challenging future researchers to develop these theories to better understand how the community affects overall youth development.

Dr. Nebbitt's personal connection with the youth in public housing provides him with a unique perspective that leads to a fresh approach to researching extremely challenging issues. When I first met Dr. Nebbitt, he was managing a community center in a classic inner-city public housing development. The development had more than 500 units in 11 high-rise buildings. Built in the early 1950s, by the late 1990s the development was the epitome of everything that was wrong with public housing. His goal was to engage as many youth as possible and to give them the tools to avoid going down the wrong path. The experiences of his youth gave him the ability to connect to many adolescents who were engaging in destructive behavior and to provide alternatives before they became victims of the violence and poverty that surrounded them. His compassion and capacity for understanding the plight of the youth who live in public housing led him to continue developing a more effective research model, which will lead to interventions that will truly improve the lives of youth and reduce the cycle of poverty.

Dr. Nebbitt's work is particularly valuable in these trying times. In all my years working in public housing, I have never seen a time when so few resources were available for social programs. Our leaders lack the political will to invest in the future by investing in our youth. Instead, the policymakers are arbitrarily cutting spending without concern about the effects. Unfortunately, the most vulnerable in our society suffer. Until we as a society have the will to ensure that all of our citizens have the opportunity to develop in an environment that provides the opportunities to reach their full potential, we are destined to repeat the cycle and let yet another generation go to waste. Hopefully, through works like this book, meaningful change can occur and restore the potential for a brighter future for children living in public housing.

Cheryl A. Lovell
Executive Director
St. Louis Housing Authority
St. Louis, MO

PREFACE

AS PART OF THE NEW DEAL, the United States launched its first attempt at providing public housing through the Housing Act of 1937. A central goal of this act was for public agencies to own and manage multifamily, low-income housing developments to help meet the housing needs of white, middle-class families affected by the Great Depression. However, a number of housing policies following World War II (WWII) provided white, middle-income families with a way to exit public housing. The United States' second major effort to provide public housing, the Housing Act of 1949, transformed these communities into segregated housing for poor racial minorities—similar to what exists in many cities today. For the most part, public housing erected slightly before and after the passage of the Housing Act of 1949 shadowed patterns of racial segregation in the broader housing market. For example, before WWII, 90 percent of the public housing developments subsidized by the United States Housing Authority and the Public Works Administration were entirely racially segregated. Furthermore, in the three decades following WWII, approximately 700,000 units of public housing were constructed by mirroring existing racial lines, which created the legacy of segregation that exists in public housing today.

These public housing policies were buttressed by a national trend toward slum clearance and urban renewal. These factors contributed to the downward income shift and hypersegregation that currently exist in public housing developments. Accordingly, public housing fell out of favor politically, leading to design flaws, inadequate management, poor maintenance, and further isolation of poor minorities.

In an attempt to rectify what many have suggested is a legacy of failed public housing policies, in the early 1990s the United States launched an ambitious strategy called Housing Opportunities for People Everywhere (HOPE VI) to transform distressed public housing developments in many large U.S. cities. Creating better life opportunities through mixed-income communities was a stated goal of HOPE VI. These transformative efforts, however, only affected a small fraction of the total U.S. public housing stock, leaving hundreds of thousands of public housing developments totally untouched. This book explores the lives of African American youth living in public housing developments that were unaffected by HOPE VI transformative effects. The central goal of this book is to support the development of a theoretical model to validate the interplay that occurs between the various domains of influence within an environment of complexities nested within urban public housing developments that were not targeted for redevelopment.

This book addresses a glaring gap in knowledge on the hundreds of thousands of African American youth living in nontransformed public housing developments. To date, there is not a single data-driven volume that examines a range of symptoms and behaviors in African American adolescents using data from multiple public housing sites located in multiple large U.S. cities. Moreover, empirical research on minority adolescents' symptoms and behaviors conducted specifically within public housing developments are underrepresented in peer-reviewed journals. This lack of empirical evidence precludes a definitive statement on the health and well-being of African American youths living in public housing developments. This dearth of empirical research also precludes the developments of preventative interventions that may increase the life chances of this vulnerable youth population. This book is an attempt to rectify this gap in knowledge and improve practice for African American youths living in public housing developments that were not impacted by transformative effects.

This volume contains three sections. Part 1 is the conceptual and theoretical foundations of this volume; it includes three chapters. Chapter 1 is an introduction that provides an overview of public housing, what populations are currently served by public housing, why public housing developments are neighborhoods in their own right, and new concepts to consider in future public housing research. Chapter 2 provides an overview of theory

and research on neighborhood effects. The purpose of this chapter is to outline various ecological models and explicate how youth are affected by a number of factors in their social and physical ecology. This chapter sets the stage for chapter 3, which introduces an integrated model on adolescent development in public housing neighborhoods. The purpose of this chapter is to provide a unified theoretical framework upon which the empirical chapters in part 2 will be based. Furthermore, this chapter may represent the first attempt to development a unified framework for future research on families living in urban public housing neighborhoods.

Part 2 is the empirical foundation of this volume; it includes five empirical chapters. Four chapters in this part are based on data collected from African American youths living in public housing in four large U.S. cities. Chapter 4 describes the research protocol and methodology used to collect the data used in this volume; it also outlines the community engagement process, defines our recruitment strategies, describes each research site, provides an overview of all measures, and provides sample characteristics. The remainder of the chapters in part 2 uses these data to test various sections of the Integrated Model on Adolescent Development in Public Housing Neighborhoods. Using latent profile analysis and multinomial logistic regression, chapter 5 assesses how adolescents' beliefs and attitudes are related to their mental health symptoms and health-risk behavior, as well as their perceptions of their communities, parents, and peers. Chapter 6 uses hierarchical regression analysis to examine community, family, and peer correlates of polysubstance use and examines the protective role of social cohesion. Using path analysis, chapter 7 explores adolescents' sexual behavior and substance use relative to a set of ecological risk factors; this chapter also assesses the protective roles of parents/caregivers and community correlates. Chapter 8 uses a general linear model to assess how the relationship between exposure to multiple neighborhood risk factors and depressive symptoms is moderated by community cohesion and adultification (i.e., the downward extension of adult responsibilities to adolescence). Each of the chapters in part 2 tests a select part of the integrated model.

The purpose of part 3 is to provide practical applications and implications of the integrated model and the empirical findings. In particular, this section provides implications for service delivery within the context of public housing developments and discusses public housing policy.

Part 3 is composed of three chapters. Chapter 9 discusses preventative intervention strategies and identifies barriers to service use among youth in public housing. Chapter 10 provides a discussion of policy implications for creating humane and livable communities in our nation's only public neighborhoods. The book concludes with chapter 11—a summary and synthesis of the volume that provides direction for future research in public housing.

ADOLESCENTS IN PUBLIC HOUSING

PART 1

Theoretical Underpinnings and Methodology

1

Introduction

CONTEXT MATTERS

▸ VON E. NEBBITT

THE AMERICAN PROJECT

PUBLIC HOUSING IS A FEDERAL program started by the U.S. Housing Act of 1937, which provided public financing for low-cost public housing. Initially, public housing was developed to meet the housing needs of white middle-class families affected by the Great Depression; however, it quickly transitioned into housing for poor racial minorities (Atlas & Dreier 1992; Bauman 1987; Marcuse 1995; Goetz 2003). The transition was due, in part, to the Housing Act of 1949 and a national trend toward urban renewal. After the passage of the Housing Act of 1949, approximately 90 percent of public housing subsidized by the U.S. Housing Authority and the Public Works Administration was segregated by race (Stoloff 2004). In the three decades following World War II, approximately 700,000 units of public housing were constructed along existing racial lines (Bauman 1987; Marcuse 1995; Goetz 2003). This contributed to the legacy of racial segregation that currently exists in many public housing developments (Atlas & Dreier 1992; Turner, Popkin, & Rawlings 2009). As a result of this transition, urban public housing fell out of political favor, leading to design flaws, inadequate funding, poor maintenance, and further isolation of poor racial minorities (Atlas & Dreier 1992).

Shortly after its inception, public housing captured national attention due to the constellation of social problems that coalesced in many public housing developments across the country. Legislators (Moynihan 1965) postulated that life in public housing contributed to a culture of poverty.

Researchers argued that life in public housing is like living "behind ghetto walls" (Rainwater 1970), while architects (Newman 1972) emphasized the lack of defensible space for the social problems in urban public housing. Several studies (DuRant, Pendergrast, & Cadenhead 1994; Epstein et al. 1999; Li, Stanton, & Feigelman 1999; Williams et al. 1998) succeeded these initial investigations. The preponderance of this evidence suggested that public housing was a failure, creating environments marked by concentrated poverty and leaving an array of social problems in its wake (Goetz 2003).

In an attempt to rectify what was deemed a failed housing policy (Goetz 2003; Turner, Popkin, & Rawlings 2009), the United States launched an ambitious $5 billion strategy called Housing Opportunities for People Everywhere VI (HOPE VI; Popkin 2007). The goal of HOPE VI was to transform (i.e., demolish and rebuild) distressed public housing developments in many large U.S. cities (Popkin 2007). Transformation efforts, however, only affected a small percentage of public housing in select large cities (Stoloff 2004). In accordance with Congressional guidelines, only 6 percent of the 1.5 million public housing units were eligible for redevelopment (Popkin et al. 2004). Popkin (2007:2) argued:

> It is also clear that the transformation effort has not yet achieved its full potential to improve the lives of poor, minority families. There is evidence that original residents ... have ended up in other troubled public housing developments or been "lost" during the relocation process.

Today, local housing authorities serve nearly a million residents in developments that were not targeted by HOPE VI. These families are still profoundly poor and highly segregated (Holin et al. 2003; Popkin 2007). It is important to note that residents who benefited most from HOPE VI were generally newer residents with higher incomes and, in some cases, were white (Popkin 2007). The racial composition of residents who endured—and continue to endure—many of the deplorable conditions in urban public housing unaffected by HOPE VI, for the most part, has not changed.

PURPOSE OF THE BOOK

The purpose of this book is to contribute to knowledge on African American youth living in public housing developments that were not targeted by

HOPE VI. The central goal of the book is to support the development of a theoretical model to validate the interplay that occurs between the various domains of influence within a complex environment (i.e., traditional public housing neighborhoods). The book achieves this goal by (1) introducing a parsimonious model of development (i.e., the Integrated Model on Adolescent Development in Public Housing Neighborhoods; see figure 3.1 for a schematic) that focuses on minority youth living in urban public neighborhoods; and (2) empirically testing select sections of the model using cross-sectional data collected from 898 African American youth living in public housing located in four large U.S. cities (i.e., New York, Philadelphia, Washington, D.C., and St. Louis).

Data used in this book were collected as part of a multisite, multicity study to assess whether African American adolescents living in public housing express mental health symptoms and engage in health-risk behaviors at a rate similar to or different from youth who do not live in public housing. These data were collected primarily from African American youth (i.e., more than 90 percent of the sample) living in public housing in the Midwest, Mid-Atlantic, and Northeastern United States. Recruitment and data collection occurred from spring 2006 until summer 2008. The study used a quasi–community-based participatory research design, with the goal of increasing participation from a population that has been underrepresented in research (i.e., African American youth living in public housing). Participants were recruited using respondent-driven sampling (Salganik & Heckathorn 2004); recruitment efforts relied heavily on young adult resident leaders within each public housing community (i.e., research site). These resident leaders also assisted with other aspects of the study during data collection. The contributing authors are aware of the research design as well as the limitations in the data. The chapters in part 2 of this volume are based on these data. A complete description of the research design, methods, and sample characteristics are detailed in chapter 4.

This volume makes three unique contributions to knowledge on African American youth living in public housing neighborhoods. First, it advances knowledge on how proximal factors on the community, family, and peer levels promote or inhibit psychological functioning and health behavior in African American youth. Second, it contributes to the scarce theoretical literature on how the social ecology in public housing is linked to African American adolescents' health behavior and psychological functioning.

Finally, it adds to evidence upon which preventative interventions may be developed to target minority youth living in urban public housing neighborhoods.

Furthermore, this book makes a practical addition to the social science and community practice (e.g., social work, public health, nonspecialty mental health providers) knowledge bases. It is has been long documented (Rainwater 1970; Moynihan 1965) that public housing neighborhoods expose children and youth to a range of adverse childhood experiences (e.g., witnessing and victimization by violence, exposure to delinquent peers, access to drugs, household conflict). Still, researchers often enter these environments assuming that public housing is simply a backdrop against which the day-to-day lives of residents are played out. However, it has been documented that the factor structure of depression in African American adolescents living in public housing differs from national samples of African American youth (Nebbitt, Mapson, & Robinson 2011). Also, practitioners often enter public housing environments with little or no baseline information on the prevalence of mental health symptoms and health-risk behaviors. This volume is a first step (of what I hope becomes many steps) to fill these gaps in knowledge and practice.

To help advance the knowledge base on African American youth living in urban public housing, this book introduces an Integrated Model on Adolescent Development in Public Housing Neighborhoods. The integrated model offers a paradigm shift from solely focusing on the shortcomings of households in public housing to examining the population's capacities and strengths. For example, this integrated model moves beyond simply examining the role that family and parents play in mitigating neighborhood-level risk factors to examining how perceived community cohesion promotes a greater sense of efficacy, mental health, and health behavior.

Notwithstanding the book's contributions, generalizing the findings beyond the sample (i.e., African American youth) and regions (i.e., Midwest, Mid-Atlantic, and Northeast) of the research sites should be done with caution. It is also important to note that the racial composition of residents in public housing differs significantly across regions of the United States. African American families are highly represented in the South, the Midwest, the Mid-Atlantic, and the Northeast, whereas Latino and immigrant families are highly represented in the Mountain region, the Southwest, and the West Coast. In addition to compositional differences across

regions, youths' experiences of living in public housing will likely differ. For example, the experience of an African American youth living in public housing in Chicago may differ significantly from the experiences of immigrant or refugee youth living in public housing in Seattle or Latino youth living in Los Angeles.

Still, this book is the first published volume on African American youth living in public housing based on data collected in multiple housing developments across multiple large U.S. cities. This volume also represents a first attempt at developing and empirically testing sections of a parsimonious model of adolescents' expression of mental symptoms and health-risk behavior within the context of public housing.

PORTRAIT OF PUBLIC HOUSING RESIDENTS

This section provides a portrayal of public housing residents and locations based on a 1994 report (the last comprehensive report on the racial composition and locations of public housing) (Goaring, Kamely, & Richards 1994) and data from the Public and Indian Housing Information Center (PIC, 2013).

In 1994, there were slightly more than 1.2 million public housing units located in 14,814 public housing development across the United States (Goaring, Kamely, & Richards 1994). Public housing households represented less than 5 percent of all households in an average census's tract. In census tracts where public housing developments were represented, public housing households composed 23 percent of all households in these census tracts; however, African Americans households represented 51 percent of the families in public housing developments in these census tracts (Goaring, Kamely, & Richards 1994). In census tracts with 70 percent African Americans, this population represented 93 percent of the residents in public housing. Latino and white public housing residents tended to be underrepresented in African American census tracts. Only 12 percent of Latino and 1 percent of white residents lived in predominately African American housing developments. Furthermore, white and Latino families typically lived in public housing located developments in census tracts where 30 percent or fewer of the residents live below the official poverty line, whereas African American families typically lived in public housing developments located in census tracts where 30 percent or more of the residents live above the

official poverty line. Public housing represented 53 percent of the households in high-poverty census tracts and only 2 percent of the households in low-poverty census tracts (Goaring, Kamely, & Richards 1994). To my knowledge, these findings have not been updated to account for the demolition or disposition of approximately 170,000 units since 1995 or to adjust for the major urban migration by higher income groups since the 2000 census (Jargowsky 2003).

Data from the PIC (2013) provide a more current picture of public housing residents. It is important to note that the PIC does not provide information on the location of public housing or on concentration of poverty, as the Goaring, Kamely, and Richards (1994) report provided. However, HOPE VI communities were built on the exact geographical location as the demolished public housing development that they replaced; therefore, it is unlikely that the geographical areas where public housing developments are located have changed.

A decade after HOPE VI, there were still 1.17 million public housing units in the United States (PIC 2013). Sixty percent of public housing units were in central cities, 19 percent were in suburbs, and 21 percent were in rural and nonmetropolitan areas. Over half of the units are designated as family developments (i.e., nonelderly and nondisabled housing developments). There were approximately 850,000 children in public housing, representing 41 percent of the residents. There were 2.2 family members per household. Most of the residents in public housing (95 percent) had incomes between 30 and 80 percent less than the national median annual income. In 2013, residents had an average income of $13,661. Slightly less than half of the residents were African American and 24 percent were Latino (PIC 2013). Despite massive transformation efforts driven by HOPE VI, many residents continued to endure challenging conditions in urban public housing. The next section explores the future of non–HOPE VI public housing developments.

THE FUTURE OF PUBLIC HOUSING

Transformations to urban public housing have captured national attention. The twenty-first century has seen tens of thousands of public housing developments bulldozed or imploded to clear the way for mixed-income communities (Goetz 2003; Vale 2002). Social commentators and mass

media have touted the success of mixed-income communities, juxtaposing photos of high-rise and barrack-style poverty-stricken housing developments against manicured, colorful mixed-income communities. However, the lion's share of redevelopment targeted distressed high-rise housing developments in select large cities, which only represents approximately 27 percent of the country's public housing stock (Stoloff 2004). Indeed, high-rise public housing developments in select cities (e.g., Chicago, St. Louis, Baltimore) had reached such levels of distress that demolition seemed a logical solution. Still, many of the problems for which public housing has become infamous are confined to large family developments in select large cities, such as Pruitt–Igoe in St. Louis and Robert Taylor Homes in Chicago (Stoloff 2004). These select failures, however, do not equate to a failed housing policy, as some have suggested (Goetz 2003).

Despite the challenges, most public housing developments provide decent and affordable housing to low-income residents in cities where shelter in safe neighborhoods is unaffordable (Atlas & Dreier 1992). First Houses on New York City's Lower East Side and Yesler Terrace near downtown Seattle are good examples. Still, with few exceptions, social commentators and legislators supported the idea that the best solution to the "American Project" was demolition (Bennett, Smith, & Wright 2006; Goetz 2003; Vale 2002). Accordingly, the demolition of public housing moved forward practically unfettered.

Since the beginning of efforts to transform public housing, there is sufficient evidence on the impact of HOPE VI to allow an initial assessment. Preliminary assessments suggest that HOPE VI has had real benefits for public housing stock. These initiatives have been less beneficial to low-income poor minorities in location-based public housing (Popkin 2008). Existing evidence suggests that residents affected by transformation efforts have remained in public housing or live in similar neighborhood conditions (e.g., high levels of violence, segregation, poverty; Popkin 2008).

During the 1990s, it would have been extremely difficult to deny that severely distressed public housing developments in several cities were in a calamitous state and in need of national intervention. Since then, however, the results of HOPE VI, although promising, have the potential to derail a discussion on the health and well-being of the millions of families still living in non–HOPE VI public housing developments. Transformations to public housing may also bring into question the need for ongoing

research within public housing. Indeed, transformations to public housing will raise several questions, including the following: Is traditional public housing simply a relic from our past? Will public housing developments be transformed into communities no longer recognizable as public housing? Will youth living in public housing experience less adverse childhood experiences? Three aspects of in HOPE VI suggest otherwise.

First, in accordance with Congressional guidelines, only 6 percent of the 1.5 million public housing units were eligible for HOPE VI funding (Popkin et al. 2004). Second, most redevelopment efforts were directed at high-rise development in large cities (Stoloff 2004), despite the fact that residents in low-rise developments expressed the greatest exposure to community violence and reported the greatest fear of community violence (Popkin et al. 2002). Third, of the 21,000 housing developments transformed by HOPE VI, only 11 percent of the occupants are returning tenants. Existing evidence suggests that original residents may "have ended up in other troubled public housing developments" (Popkin 2007:2). Popkin argued that "it is also clear that the transformation effort has not yet achieved its full potential to improve the lives of poor, minority families" (2007:2).

The facts above indicate a need for an ongoing program of research of the health and well-being of children in public housing. Also, there are several important questions about life in public housing that research has not fully explored, such as how the experience of living in public housing contributes to an adolescent's well-being or maladjustment. There is also a dearth of evidence to guide the understanding of how families in public housing adapt to these environments and how public housing promotes or inhibits adolescent development. Investigating such questions remains important for the millions of families who remain in non–HOPE VI public housing developments, as 70 percent of the U.S. public housing stock will be unaffected by redevelopment.

The idea that public housing "projects" are dangerous places to raise children is prominent in the professional literature (DuRant, Pendergrast, & Cadenhead 1994; Epstein et al. 1999; Li, Stanton, & Feigelman 1999; Moynihan 1965; Newman 1972; Rainwater 1970). Despite inconsistent and contradictory evidence, all public housing locations are treated as monolithically dangerous places. Particularly salient in the popular imagination is the iconic welfare queen and the emblematic drug lord. As the future of urban public housing is debated, there is a need to move beyond prevailing

perceptions of public housing. The future discussion of public housing must be based on empirical evidence and a comprehensive understanding of proximal processes that influence adolescents' health. This new perspective will require a paradigm shift from deficits to strengths and from shortcomings to capacities. It is important that the national discussion on public housing is not overshadowed by transformation efforts at the expense of an ongoing discussion about the well-being of the hundreds of thousands of families in public housing developments not affected by HOPE VI. This volume represents an effort to keep the discussion on families in nontransformed public housing a part of the national discussion on housing for low-income urban families.

U.S. PUBLIC HOUSING: PROJECTS OR NEIGHBORHOODS?

Prior to initiating a discussion that is premised on the assumption that urban public housing developments are unique social contexts, there is a need to establish why and how public housing developments are neighborhoods in their own right. Conceptualizing public housing developments as neighborhoods is not unique to this book. Davies (2006), in *Crime, Neighborhood, and Public Housing*, argued that public housing projects are socioeconomically and architecturally distinct neighborhoods. Also, Vale (2002), in *Reclaiming Public Housing: A Half Century of Struggle in Three Public Neighborhoods*, argued that public housing developments are in fact public neighborhoods. Although arguable, public housing developments are neighborhoods in their own right. They are politically, socioeconomically, architecturally, and, in many cities, demographically distinct from their surrounding neighborhoods. Politically, local housing authorities are invested with the authority to enact legislation specifically within the context of public housing. For example, public housing is public space; therefore, public housing neighborhoods are drug-free zones, similar to drug-free zones in public schools. Consequently, if an adolescent public housing resident is arrested for smoking or possessing marijuana within public housing, his or her family may be evicted from the housing development. Socioeconomically, public housing locations are distinct neighborhoods in that residency is based on means testing, which ensures a population with incomes 50 to 80 percent below the median income for the county or metropolitan area (HUDUSER 2009).

Architecturally, public housing was designed to be distinct from the surrounding neighborhood (Davies 2006). Demographically, public housing neighborhoods in most major cities are 65 to 95 percent African American (HUDUSER 2009). In addition to these objective reasons, the stigma associated with living in "the projects" contributes to public housing developments being residential anomalies and, therefore, neighborhoods in their own right (Vale 2002).

Conceptualizing public housing developments as neighborhoods in their own right in no way insinuates that public housing communities exist in a vacuum. Quite the contrary is true. Like most neighborhoods, public housing neighborhoods are influenced by and influence their surrounding environments. Because public housing neighborhoods are mostly located within minority low-income neighborhoods, they are often the recipients of social problems that exist in their neighboring communities. On the other hand, public housing neighborhoods are often centers of poverty. Many fall prey to drug infestation, causing the public housing neighborhood to become the epicenter of social problems and violence, which in turn spill back into neighboring communities. This dynamic interplay is best explained through the concept of spatial diffusion. Morrill, Gaile, and Thrall (1988) defined spatial diffusion as the process through which changes occurring in one place result in changes in a different place. A fuller discussion of spatial diffusion is beyond the scope of this book; however, Davies (2006) and Peterson and Krivo (2010) provided detailed discussions of the spatial diffusion of crime in the books *Crime, Neighborhood, and Public Housing* and *Divergent Social Worlds,* respectively.

Contrary to common perceptions, public housing neighborhoods are not monolithic communities. Public housing neighborhoods, although similar in many characteristics (e.g., demographics, socioeconomic status [SES]), differ significantly in their ability to create social environments that facilitate or impede optimal youth development. Venkatesh (2002) outlined how these various dynamics play out in the book, *American Project: The Rise and Fall of a Modern Ghetto.* Venkatesh found that very different social environments can exist not only between two public housing neighborhoods but between buildings within the same public housing neighborhood. There are several influences from the community, social services, family, peer, and individual domains that mitigate or exacerbate larger macro influences

(i.e., low SES, social isolation) on adolescents' development (e.g., their mental health symptoms, health-risk behaviors).

To better understand these proximal processes and how they influence the trajectories of adolescents living in public housing, it is useful to examine the concept of multifinality. Rogosch and Cicchetti (2004) argued that multifinality is a condition in which similar initial conditions lead to different end effects. Building on the concept of multifinality, this book assesses how the perceived social ecology of public housing influences health behavior and psychological functioning among adolescents living under similar SES and environmental conditions. Furthermore, building on previous research and knowledge of family formation within low-income urban African American communities, this book explores how extended kinship and fictive kinship networks provide social safety nets within public housing neighborhoods. Lastly, considering the near-absence of fathers in public housing developments, this book examines the role that the paternal caregiver plays in adolescents' well-being.

RESEARCH ON YOUTH IN PUBLIC HOUSING

Given the well-established relationship between environmental factors and individual outcomes (Earls & Visher 1997; Massey & Denton 1993; Reynolds 1998; Sastry, Ghosh-Dastidar, Adams, & Pebley 2006), there is ground to speculate that living in public housing is relevant to the understanding of the psychological functioning and health behavior of young people in public housing neighborhoods. Families in public housing are amongst the nation's most disadvantaged urban families (PIC 2013). Many live in highly segregated, poor communities often marked by multiple forms of violence and crime, exposing youth to a number of adverse childhood experiences (Goetz 2003; Duncan, Brooks-Gunn, & Klebanov 1994; DuRant, Pendergrast, & Cadenhead 1994; Turner, Popkin, & Rawlings 2009). Still, important relationships between risk and protective factors, as well as their influences on adolescents' mental health and health-risk behaviors, have not been fully explored.

A review of empirical papers published since around 2000 indicates that research on youth in public housing has, for the most part, been based on single-site data and has focused primarily on risk factors. Few of these studies included data from multiple cities, identified protective factors, or

used an ecological perspective to examine influences across domains (for exceptions, see Nebbitt 2009; Nebbitt & Lombe 2007; Nebbitt & Lambert 2009). An overview of research on youth in public housing is detailed in this section.

Using a sample of 722 sixth-grade students, DuRant et al. (2000) found that the witnessing of and victimization by community violence and multiple substance use were strongly correlated to violence perpetration. DuRant, Pendergrast, and Cadenhead (1994) also found that exposure to community violence was associated with engaging in physical fights, fighting family members in the households, and being involved in gang fights in a sample of 225 African American youth living in public housing. Bolland et al. (2001) studied a sample of 583 youth (ages 9 to 19 years) and found that hopelessness and uncertainty about the future were significantly associated with carrying weapons (e.g., knives and guns) and pulling a knife or gun on someone. Li, Stanton, and Feigelman (1999) found, in a sample of 349 youth (ages 9 to 15 years), that exposure to drug trafficking was strongly associated with exposure to other forms of community violence, delinquency, and drug use. In a sample of 355 African American youth ages 9 to 17 years, Romer and Stanton (2003) found that youth with less favorable attitudes toward sexual behavior were less likely to have initiated sexual intercourse and youth with more favorable attitudes toward condom use were more likely to use condoms consistently. Based on data received from 624 African American and Latino seventh-graders in New York, Epstein et al. (1999) found that social pressure from family and peers increased the likelihood of cigarette smoking, while unfavorable attitudes toward smoking and refusal skills lowered the odds of having smoked cigarettes. Using this sample, Williams et al. (1998) also found that social influences from adults, family members, and peers increased the likelihood of drinking alcohol, whereas unfavorable attitudes toward using alcohol decreased the likelihood of alcohol consumption.

This limited body of empirical evidence shares five salient features. First, it focuses on risk factors and deficits in youth. Second, it is based on data obtained from single sites located in single cities. Third, there is a near-absence of protective factors that may promote resilience within this population of youth. Fourth, this research does not provide any insights on how various factors across domains interact to promote or inhibit adolescents' mental health and behaviors. Finally, this research lacks a unified

framework that attempts to explicate and explain life in public housing neighborhoods.

An emerging body of research has begun to address some of these challenge areas (e.g., see Lombe et al. 2011; Nebbitt 2009; Nebbitt & Lombe 2007; Nebbitt & Lambert 2009; Nebbitt, Lombe, & Williams 2008; Nebbitt & Lombe 2010; Nebbitt et al. 2010, 2012; Yu et al. 2012). This emerging body of research on youth in public housing uses, for the most part, an ecological framework and identifies protective factors. This volume represents an extension to this emerging body of research.

LIMITATIONS IN PUBLIC HOUSING

A review of recently published books on public housing has not rectified the observed gaps in knowledge. Five volumes focus on demolishing older housing projects, retaining public housing developments (Bennett, Smith, & Wright 2006; Goetz 2003; Popkin et al. 2000; Vale 2002), or exploring the dynamics and processes within and between resident organizations and local housing authorities (Venkatesh 2002). Earlier volumes—Rainwater's *Behind Ghetto Walls* (1970) and Newman's *Defensible Space* (1973)—were premised on the assumption that public housing neighborhoods are bastions of social problems. This is evidenced by the absence of protective factors or an ecological framework to examine influences across various domains (e.g., neighborhood, family, parents, peers, self).

This research also has other limitations. For example, Reynolds (1998) treated public housing environments as extensions of surrounding neighborhoods. This is evidenced by the use of census tract data as proxies for neighborhood-level risk factors in public housing research (Reynolds 1998). This approach is problematic given that most public housing developments share census tracts with low-income neighborhoods and, in certain cities, the central business district (HUDUSER 2009). Few, if any, public housing developments occupy entire census tracts. This approach contributes to ecological fallacies. For a number of reasons, the physical environment within public housing neighborhoods is more than simply a spatial backdrop, an extension of the surrounding neighborhood, or a stage on which family life is lived. Public housing developments are politically, socioeconomically, and architecturally neighborhoods in their own right (Davies 2006), and living in these neighborhoods is a unique experience (Vale 2002).

Similar problems exist in research examining parental effects on adolescents within public housing. Of the limited research examining parental effects, most has focused on mothers' SES and maternal supervision (Reynolds 1998). Although important, this approach does not capture the dynamics in public housing, which often include extended kinship and fictive kinship networks (Burton Allison, & Obeidallah, 1995; Jarrett 2003). Furthermore, this early research did not attempt to explore the important role that fathers play in the lives of their children in public housing (for exceptions, see Nebbitt 2009; Nebbitt et al. 2012). These approaches have limited our understanding of how extended and fictive kinship networks are associated with African American youth development and well-being.

Another limitation in this area of research is how peer effects are assessed. Current approaches may not reflect the realities of life in many urban public housing neighborhoods. Current approaches to estimate peer effects on antisocial behaviors are based on youths' exposure to delinquent peers. This approach is common in delinquency research (Battin et al. 1998; Thornberry & Krohn 2003). However, given the population density in most public housing neighborhoods, coupled with the presence of gangs, it may be impossible for young people to avoid delinquent or gang-involved peers. Such approaches may underestimate the complexities of public housing neighborhoods. Within densely populated public housing neighborhoods, it is likely that negative peer effects may be moderated by a youth's efficacious beliefs and capacity to negotiate with deviant peers. Further research is needed.

A first step in rectifying these problems in public housing research is to conceptualize public housing developments as unique neighborhoods in their own rights. Conceptualizing these communities as unique social contexts, as opposed to simply poor housing embedded in poor communities, may stimulate more intellectual efforts toward understanding human development within these neighborhoods. A second step in rectifying these limitations in public housing research is the development of a unified ecological framework. A unified ecological framework that takes into account unique aspects of public housing neighborhoods may provide future research with a common starting place as investigators attempt to explain life for families in the nation's only public residential neighborhoods.

The volume represents an attempt to initiate these advances. Using an integrated model (outlined in chapter 3), this book explores how the larger society and policies can inhibit and promote a community's ability to create safe environments for children. Using our integrated model, the book examines the role that social cohesion, family, parents' behavior, and individual characteristics play in buffering the negative effects of neighborhood risk and exposure to community violence on adolescents' symptoms and behaviors. The integrated model introduces three important concepts for understanding life in public housing.

The first concept—inorganic community—provides a context for understanding the other two concepts of trophic cascading and adultification. Inorganic communities are defined as a community in which means testing and public policy define the demographic and socioeconomic characteristics of the community. In our integrated model, urban public housing neighborhoods are conceptualized as inorganic communities, in that occupancy is determined by means testing, and these communities are designed and defined by public policy. The notion of looking at communities as organic or inorganic is embedded in the functionalist perspective. Conceptualizing communities as organisms assumes that the successful functioning of a community (i.e., organism) depends upon various community members (i.e., males, seniors) playing important roles in the community. As with any organism, community members are interrelated and critical to successful functioning of the community. The concept of inorganic communities may help strengthen the understanding of key factors within the unique context of public housing neighborhoods that may promote or inhibit child and adolescent development.

The second concept is trophic cascading effects. Generally speaking, trophic cascading refers to downward domination (Strong 1992). In nature, trophic cascading occurs when top feeders are removed from the ecology, which allows low-level feeders to exploit other aspects of the ecology. In nature, this normally results in devastation to ground covering and the extinction of organisms that live in the bush (Strong 1992). Building on this concept, we proposed that trophic cascading occurs in public housing when high-status community members (e.g., adult males and seniors) are not present to regulate—and in some cases, suppress—the behavior of lower-status members (e.g., children and adolescents). We also purport that

when high-status members are unavailable, low-status members will occupy high-status roles in communities.

Within our integrated model, trophic cascading effects lead to the third concept: adultification. Robin Jarrett (1999, 2003) defined adultification as the downward extension of adult responsibilities to adolescents. Burton (2007) argued that adultification involves contextual, social, and developmental processes in which youth are prematurely, and often inappropriately, exposed to adult knowledge and assume extensive adult roles and responsibilities within their family networks. The concept of adultification may be helpful in understanding adolescent development within public housing communities.

The chapters in this volume explore the lives of African American youth living in urban public housing located in four large U.S. cities. They also offer insights into dynamics that the authors think are unique to public housing neighborhoods. It is the authors' hope that this volume stimulates a discussion on the hundreds of thousands of families living in public housing neighborhoods unaffected by HOPE VI. The authors also hope that the volume provides practitioners with actionable information to help improve the lives of minority adolescents living in urban public housing.

2

A Framework for Inquiry into Neighborhood–Institutional Relationships Related to Public Housing and Adolescent Development

▸ *ODIS JOHNSON, JR. AND VON E. NEBBITT*

INTRODUCTION

INSTITUTIONS SUCH AS PUBLIC HOUSING developments have ecological structures, features, and functions similar to those that define neighborhoods. Like neighborhoods, they possess a structural composition, have a built environment, and inspire social processes. They constitute represented communities, places of social organization, and mechanisms that bring about social outcomes. The major question addressed in this chapter extends from this reality and requires us to conceptualize these two ecological contexts and their interrelated components, as well as how they work in tandem to determine the developmental outcomes of underrepresented children.

The importance of the question extends from the vast differences in the conditions of the neighborhoods in which public housing communities are situated. Inequality between poor and affluent areas in the United States has grown since the early 1980s (Massey & Fischer 2003), adversely affecting public housing developments, which are more likely to be located in areas of concentrated poverty (Newman & Schnare 1997). Neighborhood variations may contribute to pronounced differences in the quality

of life of public housing communities, and by extension to disparities in the developmental outcomes of children. Interest in neighborhood effects has produced a healthy body of research that focuses on the developmental outcomes of children (Leventhal & Brooks-Gunn 2000) and adolescents (Duncan 1994; Halpern-Felsher et al. 1997) and relates neighborhood disadvantage to their academic performance (Sampson, Sharkey, & Raudenbush 2008). Research has also investigated the relationship between public housing residency and education (Currie & Yelowitz 2000; Jacob 2003). However, few studies explore quantitatively the connection of neighborhood conditions to the educational experiences of public housing residents in a way that incorporates the influence of their public housing community. Understanding how neighborhoods and the institutions embedded within them function in concert to shape youth's educational experiences is a first step in producing related research.

The understanding of neighborhood–institutional relationships presented in this chapter is mostly informed by an exhaustive review of the neighborhood effects research. With this literature in mind, we first provide a diagram of neighborhood–institutional relationships within an ecological context, drawing heavily from Bronfenbrenner's ecosystems theory (Bronfenbrenner 1979). We further explain the model by summarizing research related to each ecological component's influence on the development of youth. Next, we review urban relocation studies to assess the relative benefits of residing in public housing communities and neighborhoods for children and adolescents. The chapter concludes with an assessment of the field's progress and the challenges awaiting the next generation of studies.

INSTITUTIONS WITHIN THE NEIGHBORHOOD CONTEXT

The lack of distinction between neighborhood qualities and those of the institutions embedded within them is commonplace within neighborhood studies (Johnson 2010), extending from the more homogeneous social background characteristics of individuals populating those institutions and the fact that residency often determines who is served by those institutions. Therefore, to the extent either domain is responsible for youth development, their influence may be more similar than unique. Regardless of whether neighborhoods and institutions function separately to produce

similar social outcomes for young people, there needs to be a way to discuss and explore the relationships through which the similarity emerges, especially if features of either domain can be changed to support the development of children and adolescents.

In an effort to define neighborhood–institutional relationships, we present a diagram of an ecological system that represents the primary components discussed within the neighborhood effects research. The diagram's features are aligned with Bronfenbrenner's (1979) ecosystems theory, which features nested layers of ecological contexts (i.e., from macro to micro) that operate in support of child development. Rather than depicting each nested layer in concentric zones of influence, as has been the case in other representations (Simbeni & Allen-Meares 2002), figure 2.1 lays out each stratum so that more detail can be provided about their components and interactions. Beginning at the macroecological level, broader social

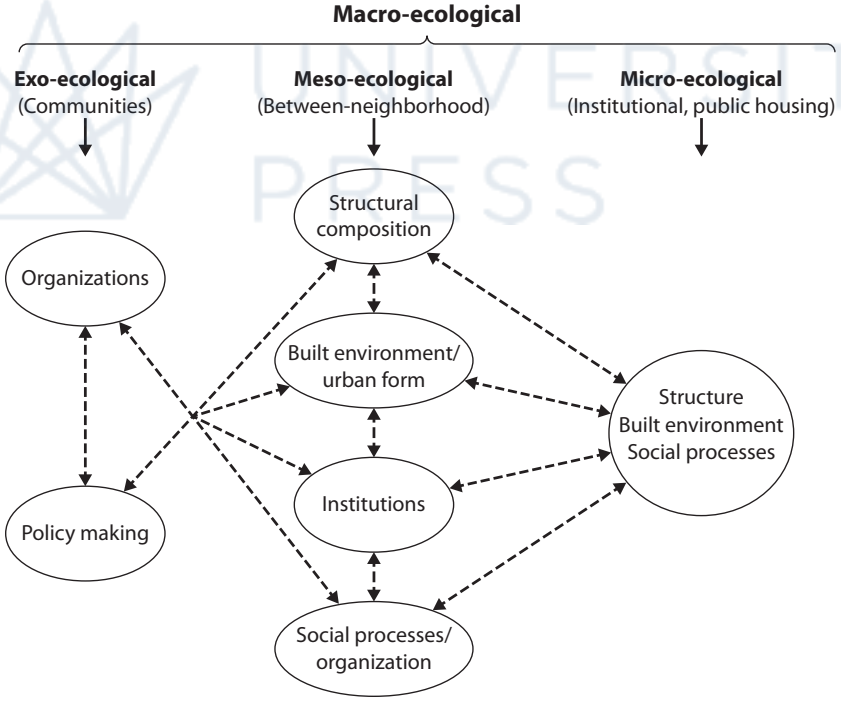

FIGURE 2.1 System of nested ecological relationships.

forces, such as changes in urban labor markets or migratory shifts within metropolitan areas, define the system of relationships at lower levels.

Venkatesh's (2002) historical exploration of the Robert Taylor Homes in Chicago described in detail the relationships between the macroecological and exoecological strata. He reported that greater demand for public housing in the late 1960s and 1970s, likely due to the macroeconomic concerns of the time, led to policy changes at the exoecological level enacted by the Department of Housing and Urban Development (HUD) and the Chicago Housing Authority. These policies gave housing preference to families with the most financial need, effectively changing the Robert Taylor Homes from a mixed-income dwelling to one primarily for the impoverished. Pattillo's (2007) account of a neighborhood's efforts to fight the return of public housing to a Chicago neighborhood emphasized the influence of courts and judicial decrees in defining the neighborhood population, the construction of large public housing structures, and the presence of public institutions. In fact, federal and state policies assisted the continued ghettoization of African Americans through the provision of public housing. HUD built large housing projects in largely black, low-income communities and imposed rules that required public housing recipients be assigned to areas that matched their racial classification (Hirsch 2000). Doing so confined the growing black population within its traditional ghetto boundaries (Massey 2007; Polikoff 2006; Yinger 2001). The exoecological level then represents the organizational and policymaking communities that influence neighborhoods and their institutions at the mesoecological level.

The components at the mesoecological stratum are defined as structural (i.e., demographic composition), of the built environment (i.e., manmade surroundings), institutional (e.g., schools, public housing, policing), and social (e.g., crime, social cohesion). Here we discuss each of these components in turn. Structure refers to the population characteristics of a particular area and is often presented within research as an average or "concentration" of certain social and behavioral characteristics. The most frequently investigated structural effects are related to the classic indicators of social stratification: social class, race, and labor market opportunity. This focus has come to characterize much of the neighborhood effects research, owing largely to Wilson's early work (1987), which speculated about the pernicious effects of macroeconomic change in increasing the concentration

of poverty in African American neighborhoods. Hence, the mesoecological level can be influenced directly by the macroecological level's impact on population characteristics as well as indirectly through the exoecological in which it is embedded. Because the macroecological level at times directly influences the neighborhood components and in turn prompts policymaking organizations to respond, the figure has bidirectional arrows in which meso-level dynamics can induce actions at the exo-level.

The built environment (i.e., manmade surroundings) is another neighborhood feature of the mesoecological stratum and is often related in research to the development of children. For example, studies have linked the presence of dilapidated housing (Limbos & Casteel 2008) and the number of rental housing units in the neighborhood (Thompson et al. 2006) to school crime and student feelings of school connectedness. Other studies looked for possible connections between the location of toxic sites (Margai & Henry 2003), public schools (Schlossberg et al. 2006) and private schools (Barrow 2005), opportunities for community center involvement (Anderson, Sabatelli, & Kosutic 2007), and the quality of signage in the area (Celano & Neuman 2001) to children's possibility of being identified as learning disabled, achievement, transportation needs to school, and literacy development.

The structural and built environment collude to shape the character of life in affordable housing communities, as indicated by the arrows in figure 2.1. For example, Hunt (2009) and Venkatesh (2002) both revealed that a significant number of large apartment units (aspects of the built environment) within public housing high-rises led to a disproportionate representation of children (an aspect of the structural environment) in those communities. Malfunctioning elevators and less adult control over peer interactions resulted, eventually contributing to an inability to police those communities and a growth in gang activities.

The diagram in figure 2.1 also identifies institutions or entities provided and managed by governmental agencies as part of the neighborhood context, primarily because institutions such as public housing heavily influence the nature of residential areas. In addition to the impact of public housing's presence on a neighborhood's poverty levels, research has established linkages between the location of public housing and a neighborhood's property values (Ellen et al. 2005; Galster et al. 1999; Green, Malpezzi, & Seah 2002), the desires and social activism of homeowners (Pattillo 2007;

Williams 2005); neighborhood crime rates (McNulty & Holloway 2000), and school safety (Limbos & Casteel 2008). As such, neighborhood components influence and also are influenced by institutions—a fact that is reflected in figure 2.1 by the bidirectional arrows between differing aspects of neighborhoods.

Finally, the mesoecological level also supports the development of social processes among neighboring individuals in the public housing and neighborhood contexts. Social processes such as peer relationships, role modeling/mentoring, social disorganization, and social cohesion are thought to better represent how neighborhood and institutional effects occur. Ainsworth's (2002) analysis revealed that social processes account for approximately 40 percent of the total neighborhood effect on education outcomes. Although many social process effects have been proposed (Gephardt 1997; Jencks & Mayer 1990), this review found seven of them to be the subject of multiple investigations and likely to arise in public housing and neighborhood contexts, as briefly discussed in the following sections.

Collective Socialization

Collective socialization acknowledges the influence adults within a public housing community may have on the behavior of children other than their own. Role model effects therefore emphasize the impact of characteristics of older community members over the decisions of younger members (Durlauf 2001). There are at least two ways in which role model effects bring about the collective socialization of area youth. In the first, behaviors are modeled for children unbeknownst to the adult. In contrast to this more passive form of collective socialization, adults may collectively and actively monitor youth in the community (Leventhal & Brooks-Gunn 2000). This kind of role modeling may have more pronounced effects because it presumes adults are active agents of influence. In the literature, however, more passive role model effects are measured, largely at the neighborhood or school level (Ainsworth 2002; Chase-Lansdale & Gordon 1996; Darling & Steinberg 1997), although reports of declining educational outcomes of affordable housing recipients in New York cite the lack of role models for children as a primary cause (Furman Center 2008).

Epidemic/Peer Processes

Epidemic processes identify how youths influence each other's behavior through imitation and peer pressure and lessen children's reliance on parents and adults for guidance and sustenance (MacLeod 1995; Rainwater 1970). After a certain prevalence or threshold of youth behaviors within a neighborhood or housing community is reached, the likelihood that other children will adopt those behaviors increases at a faster rate (Clark 1992; Crane 1991). Research has sought to differentiate between types of peer effects, separating the outcomes of group decision-making and behaviors from the individual behaviors that may develop in response to group compositional qualities (Bobonis & Finan 2008; Durlauf 2001, Graham 2003; Manski 1993), although most of these distinctions have been made about school-based peers rather than public housing or neighborhood peers. Investigations of peer effects have linked the relationship of student assessments of their neighborhood peers (Darling & Steinberg 1997; Nash 2002; South, Baumer, & Lutz 2003), the educational characteristics of neighbors (Duncan, Boisjoly, & Mullan-Harris 2001), the number of friends known by parents (Lopez-Turley 2003), and the random assignment of roommates (Sacerdote 2001) with the education outcomes of children and adolescents.

Social Networks and Capital

The composition of an environment may determine the quality of the neighbors that public housing residents must rely on for information and advice about employment opportunities, child care, and educational decisions. A few studies focus on the benefits of social ties within the neighborhood context to educational outcomes (Lundberg & Startz 2000), whereas others suggest that social ties can lead to limited success or even greater disadvantage if one's network contains neighbors and peers with fewer beneficial connections (Pattillo-McCoy 1999; Portes & Landolt 1996). Three measures of social networks explored in the literature include the level of social integration or whether there is overlap between the social networks of adults and youth in a neighborhood (Darling & Steinberg 1997); intergenerational closure, being the number of close friends known by a child's parents (Ainsworth 2002); and the occurrence of neighborhood social interaction between adults and children (Caughy et al. 2006).

Social Cohesion

Groups are considered socially cohesive when their members' interpersonal interactions operate to maintain identifiable and positive group-level membership attitudes, behaviors, attractions, and attachments (Friedkin 2004). In contrast, public housing communities and neighborhoods facing high family mobility rates would appear less cohesive. A few studies estimated the effects of social cohesion on child outcomes by considering the ability of neighbors to recognize a stranger in the neighborhood (Plybon et al. 2003), the willingness of adults to take action on behalf of their neighbors (Kohen et al. 2002), and the impact that residential stability may have on the development of relationships and norms in the area (Ainsworth 2002; Pebley & Sastry 2003; Woolley & Kaylor 2006).

Social Disorganization/Violence

Social disorganization is not only suggested by a neighborhood's inability to realize shared values and achieve desired outcomes, but also with the establishment of area norms among adults and children that work to create less safe environments (Shaw & McKay 1942). The fear associated with the observation or experience of crime, for example, is thought to reduce a resident's feelings of safety, mutual trust, and the willingness to supervise, report on, or intervene in the behavior of youth. Several studies in this area of research relate school attendance and grades to children's perception of crime (Nash 2002), their residency in areas with criminal activity (Madyun & Lee 2008), personal experiences with crime and perceptions of delinquent behavior among their peers (Bowen & Bowen 1999), and their feelings of safety and perception of neighborhood support (Bowen, Bowen, & Ware 2002; Bowen et al. 2008).

Social Control/Collective Efficacy

Collective efficacy is described as the presence of mutual trust and the shared willingness to intervene for the public good (Sampson, Raudenbush, & Earls 1997), which is essential to the effective daily management of behaviors in public housing communities and neighborhoods. As suggested in qualitative work, crime and violence can inspire families to organize

to demand more police protection and assume more collective responsibility for the safety of children (Venkatesh 2002). Hence, in contrast to social disorganization theory, crime may inspire tenants to become more socially organized and to assume more social control of their surroundings. Research in this area has considered children's opinions of whether an adult would tell other adults if they had behaved badly as an indicator of social control (Nash 2002) and the strength of peer group effects as an indicator of a neighborhood's lack of social control (Ainsworth 2002).

Racial Socialization

Ethnic/racial socialization demonstrates the endogenous quality of identity through the neighborhood's role in identity development (Borjas 1995; Durlauf 2001). A neighborhood may influence one's racial socialization and learning to the degree that its racial composition colors a child's perceptions of opportunity, his or her chances of success, and the economic returns on a personal investment in education. Research in this area has explored how various racial socialization orientations relate to differences in the cognitive performance of children given their neighborhood's racial and socioeconomic structure and its social processes (Caughy et al. 2006).

Although institutions are considered a part of the neighborhood context and as having relationships with aspects of the neighborhood, they are also depicted in figure 2.1 at the microecological level as possessing internally those same components with which they interact externally. For example, institutions also possess a structural composition. Although there is a dearth of studies about public housing population effects on children, the examination of composition effects within other institutions, such as schools, has a relatively long history (Alexander et al. 1979; Crain 1971; Crain & Mahard 1978). Institutions also possess a definitive built environment. On this point, Venkatesh's (2002) account of public housing in Chicago suggested that one of the most significant contributors to the quality of the day-to-day experiences of public housing residents was the infrastructure of the housing itself and the larger housing complex. Studies have also detailed the social organization of public housing communities, including the social activism of mothers, their practices of informal social control, and the consequences of isolation (Venkatesh 2002;

Williams 2005). Altogether, these institutional ecological components function to influence the well-being and development of youth. Examinations of public housing residency effects, for example, have investigated whether living in them leads to better educational outcomes for low-income children than other housing arrangements (Furman Center 2008; Jacob 2003; Lubell & Brennan 2007) and if children in public housing are more likely to experience grade repetition (Currie & Yelowitz 2000).

COMPLICATIONS OF NEIGHBORHOOD–INSTITUTIONAL RELATIONSHIPS

Ideal research in this area would link neighborhoods to the institutions that influence the development of youth because they spend a considerable amount of time in these environments. In fact, the activities of children living in large public housing developments rarely require them to leave the housing community (Shlay & Holupka 1991). There are, of course, challenges to the joint consideration of neighborhood–institutional relationships. Much has been written about these methodological challenges as they complicate the estimation of neighborhood effects (Duncan & Raudenbush 1999; Leventhal & Brooks-Gunn 2000; Manski 1993). Less has been written about factors that complicate the estimation of neighborhood and institutional relationships in particular. In this section, we explore issues that complicate the modeling of neighborhood–institutional relationships.

Transaction Underestimation

Work that attempts to take into consideration neighborhoods and institutions often includes institutional-level covariates in the statistical models. Considering institutions helps to limit some of the institutional bias that may arise when important institutional-level factors are unobserved. However, there is reason to believe that including institutional-level controls in models of neighborhood effects leads to an understatement of the true effect of neighborhoods on cognitive outcomes. Consider, for example, that 43 percent of units in public housing family developments are in neighborhoods where 40 percent or more of the residents live in poverty (Newman & Schnare 1997). Neighborhood poverty rates (and their racial

composition) were factors that led HUD to locate public housing in those areas. Inasmuch as the measure of a public housing characteristic (e.g., poverty) is determined by neighborhood dynamics, once included in the analysis, that characteristic may deliver part of the neighborhood's influence and thereby depress the neighborhood effect estimate.

Indirect pathways such as these also work to the opposite effect and possibly overstate the neighborhood's impact. Recall the bidirectional flow noted in figure 2.1 between the location of affordable housing and the residential decision-making of families (Pattillo 2007) and property values (Ellen et al. 2005; Galster et al. 1999; Green, Malpezzi, & Seah 2002). To the degree that public housing influences perceptions of a neighborhood's quality, public housing will have an influence on the residential makeup of the neighborhood. Neighborhood measures will subsequently appear more strongly related to the developmental outcomes of public housing residents than they should and public housing characteristics less so. The cross-currents of causality among social domains and the resulting underestimation of those domains' effects is called *transaction underestimation* and has been tested as it relates to linkages between neighborhoods, families, and the home environment (Duncan, Connell, & Klebanov 1997).

Unobserved Institutional Effects

Discussions about how an institution functions often consider its social organization (Rosenholtz 1991; Venkatesh 2002; Weick 1976; Williams 2005) or isolation (Bronfenbrenner 1979). For instance, tenants of the Robert Taylor Homes had to compensate for a lack of policing, governance, and maintenance by city officials (Venkatesh 2002). The lack of formal social control within the housing community stood in stark contrast to its presence in the neighborhood context across the city. From a more positive vantage, institutions also function somewhat independently from neighborhoods due to their social and governance organization and more definitive built environment. Quantitative research in neighborhood and public housing effects has not kept pace with thinking about the possible semi-autonomous functioning of public housing and neighborhood effects, leaving a void in research about neighborhood–institutional relationships.

Not only are few institutional factors included in models of neighborhood effects on child and adolescent outcomes, social process effects

occurring within institutions also remain largely unobserved in quantitative neighborhood studies. A look at school effects research makes this point clear. Some of the largest institutional effects within that body of literature have been of the social process kind, not the traditional factors that are frequently the subject of educational policy. School process measures in the school effects literature, for example, have demonstrated that constructs such as teacher learning opportunities, teacher certainty, and teacher commitment are between three and seven times larger in magnitude than the traditional measures of teaching experience, school socioeconomic status, and the prestige of the teacher's undergraduate institution (Rosenholtz 1991). Another study found that low-performing schools were more likely to experience increased academic productivity with improvements in relational trust—that is, mutual respect, competence, a personal regard for others, and integrity among school actors—even after controlling for teacher background and school composition (Bryk & Schneider 2002). Similarly Bryk, Lee, and Holland (1993) revealed that the large advantages Catholic schools have over public ones—teachers' enjoyment of work, staff morale, and students' interest in academics—are due almost entirely to their communal social organization.

These studies imply that social process measures are just as instrumental in accounting for institutional influences as they are to the consideration of neighborhoods. The subsequent task for neighborhood effects research is to model institutional social processes well enough to account for their effects. This will prevent those effects from being erroneously thought of as neighborhood variation in learning as opposed to variation in learning across neighborhood institutions.

RELATIVE EFFECTS OF HOUSING COMMUNITIES AND NEIGHBORHOODS

Mobility presents an opportunity to weigh the costs and benefits for youth of leaving a family housing development context, joining a neighborhood context, and often times switching schools in the process. Three of the most notable studies on this subject have produced very mixed results. The first of these studies, the Gautreaux Assisted Housing Mobility Program that was sponsored by HUD, transitioned underrepresented families from large public housing dwellings into Section 8 housing within racially

mixed urban neighborhoods or largely white suburban areas. Evaluations of the Gautreaux program typically compare the experiences and outcomes of those who moved to the largely white suburbs and those who moved to racially mixed urban areas and their schools (Rosenbaum, Kulieke, & Rubinowitz 1988; Rosenbaum 1995). Rosenbaum (1995) reported that after experiencing difficulty in adjusting to the higher standards of their new schools, children in suburban Gautreaux families generally did better in school than their counterparts who relocated to urban areas. Although college-going was valued equally among city and suburban movers, suburban students were more likely to take college-track courses and to attend a 4-year college. Although the program outcomes of Gautreaux are considered generally positive, one must use caution in concluding that certain neighborhood contexts are more beneficial for children than family housing developments.

First, the absence of a control group in the Gautreaux design prevents a comparison of segregated environments to predominantly white or racially mixed ones. It is unsafe to assume that the positive effects found for the Gautreaux children who relocated to predominantly white areas means that children in those areas did better than those who stayed behind. Consider the scenario, for example, where a control group in a segregated area, a comparison group in a racially mixed area, and an experimental group in a suburban area all experience educational gains, yet children in the racially mixed area make the least amount of progress. A significant difference in achievement might result from a comparison of the movers to the suburban and racially mixed areas, as was the case in the Gautreaux study. Both, however, might be insignificantly different from the group that did not move, whose average achievement growth is nested between that of the experimental and comparison groups. Therefore, leaving segregated areas has insignificant effects. Although purely hypothetical, this scenario demonstrates what we would know about segregation if the Gautreaux program had a control group and what we cannot rule out because it is does not.

Second, the Gautreaux findings were not replicated in two comparable studies of movers in Cincinnati's Special Mobility Program (Fischer 1991) and Yonkers (Fauth, Leventhal, & Brooks-Gunn 2007). In the first program, the Cincinnati residents who moved to the suburbs were less satisfied with the suburban schools than the residents who relocated to other parts of the city. In contrast to the results of the Gautreaux program,

Fischer (1991) reported that more than one-quarter of the suburban children generally did worse in school after relocation, compared to 10 percent of the city children. The Yonkers program revealed that moving was negatively related to the reading and math performance of children age 8 to 18 years. A difference was also found in how children in neighborhoods and those who remained in the public housing community rated their performance in school, with the latter group rating themselves well above average whereas movers rated themselves slightly above average. Finally, for both younger and older adolescents, as the age of movers increased, their school engagement decreased until it was lower than that of the youth who remained in public housing (Fauth, Leventhal, & Brooks-Gunn 2007).

The Moving to Opportunity Study (MTO), authorized by the Housing and Community Development Act of 1992, was fielded in Boston, Baltimore, Los Angeles, Chicago, and New York. In contrast to the Gautreaux program, MTO participants were randomly selected and assigned to three residential opportunities: a voucher that could be redeemed only in a low-poverty environment, Section 8 housing that had no residential restrictions, and reassignment to their current residential status. For elementary school children, the results from the Baltimore site were generally positive, with children assigned to the experimental group exceeding the scores of their counterparts in public housing in both reading and math by approximately one-quarter of a standard deviation (Ladd & Ludwig 1997).

The assessment of the New York MTO site produced results that were much different than the Baltimore study. The estimates of achievement in the New York site were of adolescents and were measured on two occasions after the families relocated (Leventhal, Fauth, & Brooks-Gunn 2005; Ludwig, Ladd, & Duncan 2001). Leventhal, Fauth, and Brooks-Gunn (2005) reported that the cognitive advantage that was found for the experimental group relative to urban ones 2 years after relocation disappeared by year 5. In some instances, the African American males who were relocated to the suburbs performed less well than the African American males who remained in public housing communities (Leventhal, Fauth, & Brooks-Gunn 2005; Sanbonmatsu et al. 2006). Two analyses of the pooled data from all five demonstration sites show no significant effects of relocation on test scores for any age group among more than 5,000 youth up to 7 years after relocation (Orr et al. 2003; Sanbonmatsu et al. 2006). In sum, the removal of

children from family housing developments does not assure their cognitive outcomes will improve by residing in low-poverty neighborhoods.

Apparently, there are lasting consequences for having at any time been exposed to resource-poor environments (Quillian 2003). Moving to a better neighborhood may interrupt the former environment's suppression of cognitive development, but the effects of the new neighborhood would have to be unusually strong to undo the influence of an adolescent's past residency in public housing and inhibit its effect on future learning. To this point, a Chicago study found that having previously resided in areas of concentrated disadvantage reduces the later verbal ability of African Americans by an amount equivalent to 1 or more years of schooling (Sampson, Sharkey, & Raudenbush 2008). The implication is that a neighborhood's social class still matters, but residential advancement becomes unable to counter its firmly rooted effects later in one's development. The greater educational performance of MTO's Baltimore children over that of its adolescents in Baltimore and New York supports this view. Programs that relocate families to higher income or more diverse areas may prove to be more beneficial for younger than older children, provided that program incentives can be put into place to compel parents to reside for longer periods of time in their new neighborhoods and enroll their children in new schools.

CONCLUSION

Quantitative inquiry in the area of ecology has a relatively short history, with the first studies of neighborhood effects (Fernandez & Kulik 1981) and cognitive outcomes (Datcher 1982) appearing in the early 1980s. The framework and research presented in this chapter suggest that ecological research has leaped toward social and scientific relevance when small steps might have been expected. First, the research that has been generated since the 1980s has informed Bronfenbrenner's (1979) ecosystem theory in child and adolescent development. This chapter recast the ecological theory in a way that organizes and summarizes the field of neighborhood and public housing effects while elaborating on the definition and function of its components as they relate to learning. In this chapter, we also briefly identified some of the conceptual challenges that arise in the measurement of neighborhood–institutional relationships, including transaction bias and the continued problem of unobserved institutional dynamics in research.

Last, we juxtaposed institutional and neighborhood contexts in their effects on children and adolescents who moved in comparison to children who did not move. Moreover and surprisingly, research in this area has not proven that neighborhood environments are better for youth development than public housing communities.

The next generation of studies benefits from the momentum of the progress underway as it faces the challenge of continuing a relentless investigation into these topics. We place the investigation of embedded ecological institutions at the forefront of the challenge to understand how neighborhoods work to influence learning. Also a challenge is the development of ecological approaches to the study of public housing developments. Although there are clear methodological obstacles to the analysis of small residential environments with fairly homogenous populations, new methodologies will meet these demands, while our imagination will find dimensions on which public housing residents vary. Hence, a primary goal of public housing research is to identify the social machinery that is hiding behind its influence on residents. Finally, the framework presented in this chapter is a heuristic for investigators to manipulate as better ideas and more research become available. This chapter will hopefully serve as a point of departure for future conceptualizations of interactions between these important domains.

3

An Integrated Model of Adolescent Development in Public Housing Neighborhoods

▸ *VON E. NEBBITT, KATHY SANDERS-PHILLIPS, AND LISA R. RAWLINGS*

PUBLIC HOUSING CAN BE BROADLY defined as government-owned housing for low-income individuals and families (HUDUSER 2009). With the exception of the Mutual Ownership Defense Housing Division of the Federal Works Agency, the slum clearance polices and American's legacy of residential segregation created the context for location-based public housing neighborhoods that exists in the United States today (Goetz 2003). Slum clearance ensured that public housing neighborhoods would be built in areas of extreme poverty, and residential segregation ensured the overrepresentation of nonwhite families in public housing. Currently, 70 percent of the public housing neighborhoods in metropolitan areas are located in poor African American communities (HUDUSER 2009). Consequently, public housing communities are now isolated pockets of concentrated poverty primarily occupied by nonwhite families and often marked by an array of social ills. For example, in the District of Columbia, homicide rates are 10 times higher and assault rates are 47 times higher in public housing compared with non–public housing neighborhoods (U.S. Census Bureau 2000). Given the high rates of violence, crime, and drug use in many public housing developments, scholars have been paying increased attention to the effects of growing up in these communities on child and adolescent development.

Despite this increased interest in minority youth in public housing neighborhoods, there are no theoretical models that examine the causal linkages between living in urban public housing neighborhoods and the

developmental trajectories of minority youth. The limited research on adolescents living in public housing has not used a unifying framework that captures the unique aspects of life in urban public housing neighborhoods. This gap in the literature has contributed to a fragmented approach to assessing how various domains influence child and adolescent development within the specific context of urban public housing neighborhoods. The purpose of this chapter is to introduce an integrated approach that combines various perspectives in a unified approach to understand the complex phenomenon of growing up in our nation's only publicly owned, and in some cases managed, residential communities.

ENVIRONMENT AND DEVELOPMENT

As discussed in chapter 2, research and theory focusing on the impact of neighborhood characteristics on child and adolescent development date back to the turn of the twentieth century. However, Bronfenbrenner (1979) was one of the first theorists to emphasize the importance of understanding child development in relation to the environment in which a child lives and develops. He posited that the environment in which a child lives is composed of a number of layers that have interlocking/transactional effects on the child. To fully understand a child's mental and physical development, we must assess relationships between a child and his or her immediate environment, as well as the influence of the larger social environment on the child, the family, and the immediate environment (Dubow, Edwards, & Ippolito 1997; Simons et al. 2002, 2006). Similarly, ontogeny constructs and hypothesized causal linkages related to developmental trajectories must incorporate an understanding of interactions between social and environmental factors in youth (Barrow et al. 2007).

Others have argued that the impact of the urban environment must be included in any theoretical discussion of the development of minority children (Burton, Allison, & Obeidallah 1995; Chestang 1976; Coll et al. 1996; Dubow, Edwards, & Ippolito 1997; Luthar & Burack 2000; McHale 1995; McLoyd 2004; Spencer 1990). Scholars have concluded that living in low-income segregated urban environments, such as public housing neighborhoods, represents a unique and unshared experience that may significantly influence developmental outcomes of African American and, increasingly, Latino children in the United States (Barrow et al. 2007; Brooks-Gunn

et al. 1993; Coll et al. 1996; Jarrett 2003; Nebbitt & Lombe 2007; Sanders-Phillips 2009). This literature brings to bold relief the critical need to develop a theoretical framework that identifies the features of the environment that directly and indirectly affect youth outcomes and that hypothesizes the dynamics undergirding health and development among minority youth living in urban public housing developments.

It should be reiterated that research has examined the influences of community violence on the symptoms and behavior of youth living in public housing (Bolland et al. 2001; DuRant et al. 2000, Li, Stanton, & Feigelman 1999; Nebbitt 2009). However, a unifying framework that identifies and explains the unique aspects of life in urban public housing neighborhoods is lacking. Traditional models of urban minority child development have formed the foundation of this work, yet they pose their own limitations.

Traditional Models of Child Development for Urban Minority Youth

Historically, theories designed to explicate the developmental trajectories of minority youth and explain ethnic differences in developmental outcomes of youth in general have focused primarily on individual or sociocultural factors. While some scholars (Herrnstein 1971; Herrnstein & Murray 1994; Jensen 1969; Shuey 1966) have focused on genetic factors (e.g., innate differences in physical, intellectual, and psychological development across races) to explain ethnic differences in child development, other scholars (Moynihan 1965; Sears 1975; Senn 1975; Wilson 1987) have argued that sociocultural factors, such as poverty or social isolation, deprive minority youth of the benefits and advantages of white, middle-class children and result in developmental difficulties. These perspectives have contributed to a body of literature that portrays urban minority youth, particularly African Americans, as "deviant" relative to the dominant group (i.e., white middle-class; Luthar & Burack 2000; Barrow et al. 2007).

Notwithstanding the many urban minority youth who become well-functioning citizens (Dubow, Edwards, & Ippolito 1997), these perspectives have contributed little to the understanding of how urban neighborhoods, such as public housing developments, positively influence the health and development of minority youth (Luthar & Burack 2000; Shaffer, Forehand, & Kotchick 2002). Consequently, more is known

about the psychopathologies in urban minority youth, particularly African Americans, than about their resilient functioning and how to foster optimal development despite their environmental challenges (Barrow et al. 2007; Zimmerman, Ramirez-Valles, & Maton 1999).

Another salient feature of traditional perspectives on child and adolescent development is that adolescence is conceptualized as an extension of childhood; that is, adolescence serves as a "moratorium" before adolescents are expected to take on adult responsibilities (Luthar & Burack 2000). Although adolescence may serve as a hiatus for middle-income nonminority adolescents, numerous complications arise when attempting to apply this assumption to low-income minority adolescents, particularly African American youth living in public housing neighborhoods (Luthar & Burack 2000).

Due to factors such as high rates of poverty, the number of single-parent households, and the need for adolescents to contribute to household maintenance, minority adolescents living in public housing communities are often required to assume adult roles (i.e., "adultify") and do not experience adolescence as a transitional phase (Jarrett & Jefferson 2004). The concepts of trophic cascading and inorganic communities, both outlined in the introduction, may help one to understand this phenomenon. In nature, trophic cascading simply refers to downward domination (Strong 1992). In natural ecological systems, trophic cascading occurs when top feeders are removed from the system, leaving an ecological niche to be occupied by low-level feeders (Strong 1992). Trophic cascading occurs in human ecological systems when top-status members (adults and seniors) in the social ecology of community are not available to regulate, and in some cases suppress, the behavior of lower status members (children and adolescents), and top-status members are unavailable to occupy important ecological niches in the family and the community. The probability of trophic cascading increases in inorganic communities due to the near absence of employed adult males and a vanishing senior population.

It is likely that the downward extension of adult responsibilities to adolescence (i.e., adultification) is the process of trophic cascading within inorganic public housing communities. Evidence of these effects has been reported by others (Burton, Allison, & Obeidallah 1995; Jarrett 1999, 2003). The reality of life in public housing neighborhoods influences the developmental trajectories of minority youth living in these communities.

It is also likely that notions of psychopathology and health-risk behavior among youth in these communities are overestimated due to a lack of awareness or consideration of adaptations and contextual norms and expectations (Batey 1999; Cooley & Boyce 2004; Cross 1998; Klevens & Roca 1999; Neal-Barnett 2004; Sharma & Sharma 1999; Tyler et al. 1992).

Theoretical Foundations for an Integrated Model

The literature discussed thus far underscores the critical need for theories that explicate youth development in urban communities such as public housing. These theories should acknowledge and address the influence of contextual factors on child and adolescent development, health, and well-being. This is particularly important given the history of isolation and concentrated poverty in public housing neighborhoods.

To contribute to this discussion, we have developed an Integrated Model of Adolescent Development in Public Housing Neighborhoods. This model is intended to (1) contribute to the current gaps in theoretical knowledge on families in public housing, (2) offer alternative explanations for the multifinality experienced by youth in public housing, and (3) connect the fragmented approaches to understanding the complexities of adolescent adaptations and development in this unique context.

This model has been informed by four existing theoretical perspectives: the psychology of place, the ecological perspective, the protective and vulnerability perspective, and the developmental competences in the minority child model. The psychology of place and related work describes the ways in which people are connected to places and the impact of these connections on well-being (Fullilove 1996, 2005). Underlying this body of work are two assumptions: people strive for a sense of belonging to a place (Fullilove 1996, 2005), and homeostasis of the environment supports and influences the homeostasis of the individual (Bowlby 1973). According to Fullilove, it provides "the external realities within which people shape their existence" (1996:1518). It also defines what is normal for individuals and the communities in which they reside.

As discussed in previous sections, scholars have empirically established this link between environmental factors and individual outcomes; however, these perspectives do not offer explanations of the processes by which the environment shapes individuals. Three overlapping processes are

theorized to connect individuals with certain places: familiarity, attachment, and identity. Familiarity with places promotes "a sense of continuity and equilibrium in the lives of residents and shapes how people secure food, where people find shelter, where they seek comfort and refuge, and who they can trust" (Rawlings 2007: 148). Loss of a sense of familiarity may result in disorientation and confusion. Attachment to one's home, because of the connotations of safety and refuge, provides a sense of "ontological security" (Dupuis & Thorns 1996). Low and Altman (1992) contended that attachments to home expand concentrically outward from the home to include community, neighborhood, and city. Loss of these attachments may be experienced as nostalgia or depression. Place identity is a component of individual identity formation. The social status of the place may be ascribed to the individual. Fullilove (1996) further contended that having a place that is not esteemed by others may cause individual feelings of alienation. The research on psychology of place and belonging begins to establish the theoretical foundation and holds particular salience for the discussion of African American youth in urban public housing.

Ecological Transaction Perspective

The ecological transaction perspective argues that development in youth must be examined and understood in the child's context because different environments will elicit different reactions from the same youth (Bronfenbrenner 1977; Cicchetti & Lynch 1993; Sameroff & Chandler 1975). Similarly, the environment cannot be assessed apart from the youth because different youth will elicit different reactions from the same environment (Dubow, Edwards, & Ippolito 1997). This approach contends that neither normal nor pathological development results solely from a biological process or a type of environmental reinforcement (Cicchetti 1987, 1989). In addition, linear chains of causality are rare, and the process of human growth takes a more circuitous course. Discontinuity, rather than continuity, is expected between developmental stages (Mrug, Loosier, & Windle 2008; Sameroff & Chandler 1975).

The protective and vulnerability perspective posits that salient protective and vulnerable factors affect at-risk adolescents at the community, family, and individual levels (Garmezy 1985; Rutter 1987; Werner & Smith 1982, 1992). Protective factors can be internal and external resources that

modify or buffer the impact of risk factors and influence a child's reaction to environmental stressors that could possibly lead to maladaptive outcomes (Masten 1987; Werner & Smith 1992). Vulnerability factors exacerbate risk factors and can include gender, age, and family socioeconomic status (Luthar, Cicchetti, & Becker 2000; Rutter 1987). Protective and vulnerability approaches are most useful when exploring the interactions between risk and protective factors (Smokowski et al. 2004).

The developmental competences in the minority child model (Coll et al. 1996) argues that the U.S. social stratification system relegates low-income minority families to racially, psychologically, and economically segregated neighborhoods. The model further postulates that to thrive and survive in these segregated neighborhoods, children and families develop an adaptive culture.

Assumptions of the Integrated Model

The Integrated Model of Adolescent Development in Public Housing Neighborhoods has six underlying assumptions. First, discriminatory housing policies result in residential segregation that isolates low-income African American and Latino families in public housing neighborhoods. Second, a public housing policy that relegates poor families to segregated neighborhoods, promotes single-income households, and does not provide adequate community and supportive service will create inorganic communities. Third, inorganic public housing communities perfect the condition for trophic cascading effects in the social ecology of public housing, leading to a unique milieu within which African American and Latino children and adolescents must adapt and adjust. Fourth, African American and Latino youth will experience dual identities from living in two worlds (public housing and mainstream) and two roles (adolescent and adult). This phenomenon, which is described as having orthogonal demands and values (Burton, Allison, & Obeidallah 1995; Fordham & Ogbu 1986; McHale 1995), will significantly influence their developmental trajectories and outcomes. Fifth, because of these community characteristics and individual challenges, African American and Latino adolescents living in public housing communities are at high risk for psychological distress (e.g., posttraumatic stress disorder, depression, role confusion) and health-risk behavior (e.g., drug use, aggression; Brooks-Gunn et al. 1993; Dubow,

Edwards, & Ippolito 1997). Finally, community members and families will develop adaptive strategies within inorganic communities in an effort to promote adolescent well-being and foster resilience in children (Burton, Allison, & Obeidallah 1995; Fordham & Ogbu 1986; McHale 1995).

AN INTEGRATED MODEL OF ADOLESCENT DEVELOPMENT IN PUBLIC HOUSING NEIGHBORHOODS

A schematic of our Integrated Model of Adolescent Development in Public Housing Neighborhoods is presented in figure 3.1. The Integrated Model of Adolescent Development in Public Housing Neighborhoods describes

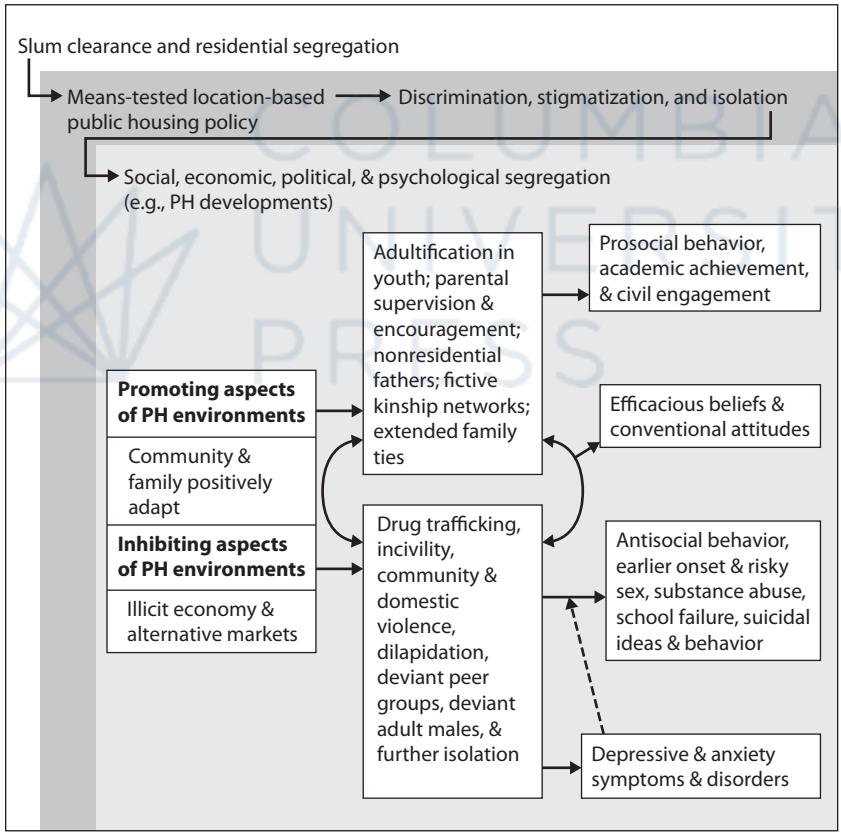

FIGURE 3.1 The Integrated Model on Adolescent Development in Public Housing Neighborhoods. Curved arrows indicate interaction effects, arrows indicate direct effects, and dotted-line arrows indicate moderation/mediation effects. PH, public housing.

the major aspects of life in public neighborhoods that may operate in the distal and proximal domains to influence the development of youth living in these communities. Our model is guided by existing theoretical frameworks and empirical evidence that have identified factors and mechanisms by which place, context, and environment affect child development. Knowledge of the contextual/environmental determinants of development among minority adolescents living in public housing is essential to the development of rigorous research protocols and successful preventative interventions in public housing neighborhoods.

Distal Factors That Influence Child Outcomes

The first factors identified in the model are distal-level factors. They operate at the level of the larger social system and society. The specific system factors that are hypothesized to influence child outcomes in public housing include the institutions (e.g., governments, banks) and policies (e.g., legal systems of racial segregation) that affect the quality of life, particularly housing and schooling, for low-income urban families. Therefore, the first section of the model describes the distal-level factors that governed the creation of public housing, which isolate these communities from other neighborhoods in the United States. Emphasis is placed on the social and legal policies that restricted specific income and racial/ethnic groups (e.g., people living in poverty, African Americans, Latinos) to segregated housing. These policies fostered the social isolation of specific groups, as well as the geographic isolation of these groups within urban areas (de Leeuw et al. 2008; Solomon 2004). For example, public housing has historically been located in poor and older urban neighborhoods occupied by poor minorities (Goetz 2003). Most public housing built from the 1950s to the 1970s was located in poor, racially segregated communities (Solomon 2004). Patterns of residential segregation in public housing reflect the social norms of the time that they were built (Goetz 2003).

A Housing and Urban Development report on the racial composition of location-based public housing found that, despite the slow easing of racial segregation in public housing, most African American public housing residents continue to live in disproportionately minority neighborhoods (Goaring, Kamely, & Richards 1994). These communities are also differentiated by income; that is, the majority of these housing developments are located in poverty-concentrated neighborhoods. Accordingly, families in public

housing experience economic, political, and social isolation that contributes to ethnic differences in access to societal resources and sources of power in the larger society (de Leeuw et al. 2008; Solomon 2004). In turn, these differences in social power and access are significant correlates of ethnic differences in mental and physical health outcomes as well as risk behaviors such as drug use, unsafe sexual practices, and aggression in youth (Sanders-Phillips 2009).

The impact of residential segregation and social position factors on child development are mediated through the mechanisms of discrimination, stigmatization, and isolation (Coll et al. 1996). Discrimination, stigmatization, and isolation foster the low-resource and fragmented environments that currently exist in communities such as public housing (Sanders-Phillips 2009; Coll et al. 1996). The isolation that exists in public housing communities occurs across several dimensions, including residential, economic, social, and psychological (Coll et al. 1996). Similarly, the impoverishment that characterizes these communities is also multifaceted, involving restrictions of household incomes, the lack of an opportunity structure (e.g., employment options), the near absence of healthy life options (e.g., no large supermarkets, little green space such as parks), and the near absence of adult males. For example, common aspects of life in public housing (e.g., income restrictions, mostly single-female–headed households) not only result in stigmatization for youth and families but also reinforce perceptions of isolation because these aspects of life are generally unshared by nonminority youth not living in public housing. Collectively, these aspects of life—and the resulting isolation and impoverishment—create inorganic communities. It is the inorganic nature of public housing neighborhood environments that creates the unique conditions that significantly influence psychological functioning and behavior in youth, as well as their interactions with family members and other community residents.

Proximal Factors and Processes Influencing Adolescent Development

The next section of our model describes the potential effects of distal factors on public housing communities, families, and adolescents in these developments. The larger social environments in which a child lives indirectly affect their functioning and development by creating family stress and providing illegitimate opportunity structures for youth groups (Berk 2000;

Cloward & Ohlin 1960). Other connections between the structures of the child's immediate environment may influence factors such as their peer associations, the behavior of their parents, and cultural norms in other community residents. For example, due to isolation and low financial resources, families in low-income public housing are likely to form fictive kinship networks and stronger extended family ties in an effort to develop sound social support networks. Adults who are not biological relatives may be identified as family members to assist with childrearing and to provide emotional support for family members (Guttman 1976). Several studies have documented the existence of extensive kin networks within African American communities (Aschenbrenner 1973; Martin & Martin 1978; McAdoo 1981; Stack 1974). This body of literature highlights the importance of these networks as sources of informal social support (Hatchett, Corcoran, & Jackson 1991; Taylor 1988; Taylor & Chatters 1991; Stack 1974).

Research suggests that fictive kin relationships are an integral component of these networks (Anderson 1976; Aschenbrenner 1973; Burton, Allison, & Obeidallah 1995; Jarrett 2003; Martin & Martin 1985; Stack 1974; Tatum 1987), and extending kinship status to nonbiological community members is a means to strengthen one's social network. Persons who are designated as fictive kin are unrelated by either blood or marriage, but they regard one another in kinship terms (Sussman 1976). They employ a standard cultural typology (i.e., likened to blood ties, sociolegal or marriage ties, and parenthood) to describe these non-kin associations (Rubenstein et al. 1991). Accordingly, rights and statuses usually associated with biological family members are bestowed upon individuals in the fictive kinship network. With the designation of fictive kinship comes both respect and responsibility; fictive kin are expected to participate in the duties of the extended family (Chatters, Taylor, & Jayakody 1994).

Our integrated model posits that this community adaptation may serve as a buffer against some of the negative elements in public housing developments, which may foster pro-adaptive responses in youth, despite living in challenging environmental conditions (Dubow, Edwards, & Ippolito 1997; Egeland, Carlson, & Stroufe 1993; Evans et al. 2005; Garmezy, Masten, Tellegen, 1984; Mrug, Loosier, & Windle 2008). Barrow et al. (2007) have argued that the availability of formal and informal social supports is critical to youth development because these social systems provide the resources and support that serve as foundations for positive youth development.

Despite the importance of fictive ties and the extended family networks of African Americans, little is known about fictive kin generally. Quantitative evidence as to the general pervasiveness of these ties is missing from the empirical literature (Chatters, Taylor, & Jayakody 1994).

In addition to forming extended support networks, public housing communities are likely to develop negative adaptations given larger distal factors. For example, the policy of means testing creates scarcity in monetary resources and encourages disproportionate numbers of low-income younger single mothers with children. In addition to limited defensible space (Newman 1972), this fact increases the likelihood that public housing neighborhoods may become epicenters of illegitimate opportunities and alternative markets, such as a depository for stolen goods and elaborate drug distribution networks (Elliott et al. 1996). The presence of illegitimate opportunity structures and alternative market activities increases community violence and incivility that, in turn, contribute to domestic conflict and parental stress as families struggle to cope with these nefarious activities in their neighborhood (Elliott et al. 1996). For example, public housing may also have abandoned buildings and other indefensible spaces where violence is likely to occur, and youth who spend time in these settings may be more vulnerable to antisocial and other unhealthy behaviors (Felson 2002; Newman 1972). This volatile situation is intensified because of trophic cascading among young males in alternative markets (e.g., drug markets) within public housing developments. Due to trophic cascading, younger males are assuming leadership roles in neighborhood drug markets. Hagan (1994) reported that younger males who lead drug markets are more likely to use violence as a means to resolve conflict compared to older males. Furthermore, young leaders of these illegitimate and alternative markets reward youths' involvement and create support networks that encourage, or at least tolerate, involvement in other health-risk behavior (e.g., perpetration of violence, drug use, promiscuity, carrying weapons), which further increases domestic (parent–child) conflict (Elliott et al. 1996).

Families are likely to respond to the violence as well as the presence of illegitimate and alternative markets by increasing the monitoring of their adolescent offspring (Hill & Jones 1997). However, these illegitimate markets provide an opportunity structure for delinquent and other antisocial behaviors for youth. The impoverished conditions of most public housing neighborhoods and the presence of alternative markets decrease prospects

of a promising future for youth and increase their fears of being victimized or harmed (Dubow et al. 2001). These neighborhood conditions also provide environmental niches (indefensible space and vacant apartments) and illegitimate opportunities (e.g., drug sales, organized gangs), which may increase youth involvement in antisocial and health-risk behavior (Barrow et al. 2007; Felson 2002; Wiehe et al. 2008).

Youth Outcomes

Through their day-to-day interactions with family members, community residents, and institutions in the neighborhood, youth in public housing also learn to adapt to the normative standards of life in inorganic communities. Youth responses to life in these settings may be pro-adaptive or maladaptive and often require a set of values, attitudes, and behaviors that differ significantly from mainstream values, attitudes, and behaviors (MacLeod 1995).

For example, youth adaptations to economic deprivation have been well documented (Jarrett 1990, 2000; MacLeod 1995; Sullivan 1989; Williams & Kornblum 1985). Burton (1991) reported that children in these communities often develop an adult, take-charge attitude, as evident in 8-year-old female caregivers. Stack and Burton (1993) found that this tendency to take on adult responsibilities can be both expected and rewarded, as evidenced by attitudes that a youth's commitment to the care of an elderly relative is a successful developmental milestone. Jarrett (2003) referred to this downward extension of adult roles as "adultification."

From a traditional conceptualization of adolescence (e.g., an extension of childhood and moratorium before adult responsibilities), the behaviors exhibited by the youth living in public housing neighborhoods are considered to be abnormal or atypical developmental trajectories for adolescence. However, due to individual and family adaptations to conditions in public housing environments, these behaviors are considered normative. Unfortunately, few quantitative studies have examined how the acquisition of adult roles and responsibilities during adolescence (i.e., adultification) is related to adolescents' symptoms and behavior among public housing youth (see Nebbitt & Lombe 2010, for exceptions). There may be both positive and negative consequences of adultification for youth.

There are also psychological costs associated with life in conditions of poverty, isolation, and potential danger. Youth in public housing may

conclude that the world is not fair and develop psychological distress responses (e.g., anger, depression, anxiety, posttraumatic stress) that are related to aggression, drug use, and association with antisocial peers as well as difficulties in emotion regulation, which is critical to the display of empathy (Daiute & Fine 2003; Kuther & Wallace 2003). These experiences may also influence youth's conceptions of justice, care, and empathy, which are related to subsequent aggression and violent behaviors (Kuther & Wallace 2003). If youth matriculate into a deviant peer group or into the alternative market enterprise, the likelihood of significant mental health problems, aggression, and poor developmental outcomes increases (Barrow et al. 2007; Brooks-Gunn et al. 1993; Dubow, Edwards, & Ippolito 1997; Dubow et al. 2001). Comorbid antisocial behavior and mental health problems in urban African American adolescents is well documented in the empirical literature (Neighbors, Kempton, & Forehand 1992; Ulzen and Hamilton 1998).

It is important to acknowledge that adolescents are not merely passive recipients of their environmental experiences. They contribute to their own socialization via their attitudes toward deviance, sense of social responsibility, and self-efficacy. They positively influence family processes via their contributions of time with siblings, household chores, and money, whereas they negatively influence family functioning through their involvement in delinquent behavior and substance use. They also affect neighborhood characteristics by their civic engagement or their involvement in alternative markets within public housing (Barrow et al. 2007; Dubow, Edwards, & Ippolito 1997; Dubow et al. 2001).

It is through these ecological transactional processes that adolescent development emerges (Barrow et al. 2007). We posit that transactions between contradicting elements (risk and protective factors) in densely populated public housing neighborhoods may account for the heterogeneity in outcomes for youth from these neighborhoods (Dubow, Edwards, & Ippolito 1997).

SUMMARY AND IMPLICATIONS FOR INTERVENTION

Based on existing evidence, one should expect that the development of youth in public housing neighborhoods would differ from adolescent development in non–public housing neighborhoods. Several elements

of public housing neighborhoods (e.g., policies that restrict incomes and discourage two-parent households, discrimination, stigmatization, isolation, residential segregation, lower social positions, pockets of illegal activity and incivility) provide experiences that are unshared by non–public housing neighborhood youth. Transactions among these unique elements and subsequent adaptations result in pro-adaptive or maladaptive functioning (or combinations of both), which are linked to more distant factors, such as perceptions on how to help the poor (means-tested public assistance), attitudes towards racial minorities (racism), and geographical segregation based on socioeconomic status and race or both (slums).

Despite the challenges present in public housing communities, there is increasing evidence that resiliency can be fostered in youth in these neighborhoods. However, theory suggests that, for youth to thrive in these settings, there must be a concentration of protective factors that outweigh the risk factors to which these youth are exposed. For example, the accumulation of risk model posits that children at greatest risk for poor developmental outcomes are those exposed to multiple forms of stress concurrently (Finkelhor et al. 2007; Garbarino 2001). Youth may be capable of coping with low levels of risk; however, once the accumulation reaches a certain threshold, there must be a major concentration of opportunity and other protective factors or processes to prevent serious harm (Garbarino 2001; Perry et al. 1995; Sameroff et al. 1987). Thus, youth in public housing may be at especially high risk for poor outcomes.

To address these issues, the Integrated Model of Adolescent Development in Public Housing Neighborhoods is premised on existing findings regarding resiliency in youth growing up in conditions of poverty and other barriers (Barrow et al. 2007; Egeland, Carlson, & Stroufe 1993; Evans et al. 2005; Garmezy, Masten, & Tellegen 1984; Mrug, Loosier, & Windle 2008). In sum, our model suggests the following:

1. Maladaptive functioning is not the ineluctable result of exposure to risk factors.
2. Protective factors buffer the negative effects of risk exposure and contribute to pro-adaptive functioning despite the presence of risk.
3. The closer the protective factors, the lower the probability that risk exposure will result in maladaptive functioning.

4. No one protective factor is a panacea across all behavioral domains; rather, protective factors are domain-specific.
5. Within public housing neighborhoods, linear development is rare. The process of adolescent development takes a more circuitous course. Discontinuity, rather than continuity, is expected between developmental stages.
6. The impact on risk and protective factors on adolescents' symptoms and behavior will depend on the gender of the youth.

The chapters in part 2 will test parts of the integrated model using a sample of African American adolescents living in public housing neighborhoods in four large U.S. cities. The subsequent empirical chapters focus on different aspects of our integrated model. Some chapters examine internalizing symptoms, whereas others examine externalizing behaviors. However, all empirical chapters incorporate selected variables from promoting and inhibiting aspects of public housing neighborhoods. Some empirical chapters also examine how internalizing symptoms interact with inhibiting and promoting aspects of public housing neighborhood to affect externalizing behavior.

PART 2

Empirical Section

4

Methodology and Procedures

▸ *VON E. NEBBITT, TAQI M. TIRMAZI, AND TAREK ZIDAN*

FROM SPRING 2005 THROUGH SUMMER 2008, cross-sectional data were collected from 898 African American adolescents living in public housing developments in four large U.S. cities: New York City (Queens), North Philadelphia, St. Louis, and Washington, DC. The data we collected and used for analyses in the following chapters are all self-reported and obtained using standardized instruments.

The purpose of this chapter is to explain the methodology and procedures used to conduct this study. The chapter is presented in four sections. First, we describe the process for community engagement. Second, we explain the research protocol and provide a brief description of the sample. Third, we describe all measures used to collect data, including scoring information and psychometric properties where applicable. Finally, we describe each housing development, including the socioeconomic and demographic characteristics of each research site.

COMMUNITY ENGAGEMENT

Community engagement was achieved with the use of a consistent, malleable, and sensitive plan. The consistency of the plan involved a methodological process that was built on community ties and that reliably culminated with the successful collection of data. The malleability of the plan required a willingness to make slight modifications to accommodate the unique characteristics of each public housing development. The sensitivity of the plan included an awareness that public housing communities

are not monolithic; each housing site is a unique context in its own right, and within each context cultural norms may differ.

The community engagement plan consisted of five steps. First, the principal investigator (PI) contacted the local housing authority to garner its support. Second, the PI and research assistants (RAs) identified and contacted a community/recreation center or social service agency (i.e., community-based organizations) in or adjacent to the housing development. Third, the PI hired a staff member (normally a recreation aide) from the community-based organization and a resident from the housing development as a community liaison. Fourth, the RAs and community liaisons posted flyers throughout the housing development and in the surrounding community. Finally, the PI, RAs, and community liaison (i.e., the research team) convened potential youth participants to the community centers, screened them for the inclusion criteria, and administered the survey to youth who met the inclusion criteria.

Community engagement is the essential key to successful community-based research. In each city, the research team identified three key community stakeholders (public housing residents, community centers/social service providers, and local housing authorities) that were necessary to achieve the goals and objectives of community-based research. Public housing residents were, without a doubt, the primary stakeholders. The research team fostered genuine rapport with residents and asked for their involvement in all phases of the research project. Residents were considered to be the primary stakeholders because their involvement was a necessary and sufficient condition to the success of community-based research within public housing developments. It is our position that without their support and "buy in," research in public housing would be impossible or extremely challenging and would yield unreliable data. Furthermore, we believe that data obtained by circumventing residents' involvement should be interpreted with extreme caution.

The secondary stakeholders were the community/recreation centers and social service providers in or near the housing development. The service sectors were considered to be the secondary stakeholders because they were necessary but not sufficient for a program of research within public housing developments. Tertiary stakeholders were the local housing authorities. Local housing authorities were considered to be the tertiary stakeholders because their participation was neither a necessary nor sufficient condition

to a successful program of research within public housing developments. This statement should not be interpreted as an endorsement to circumvent local housing authorities when conducting research in public housing. However, we believe that a program of research can be successfully initiated and completed without involvement from the local housing authority. It should be noted that letters of support were solicited from the local housing authorities from all cities in this study. Housing authorities in each city supported this research. In the next section, we outline the roles of community stakeholders.

ROLE OF LOCAL HOUSING AUTHORITIES

The PI sent a description of the study to the director of resident services in each housing authority. The write-up included a brief overview of the proposed study and requested a meeting to discuss the study in greater detail. Three of the four housing authorities responded favorably to our invitation. The housing authorities that agreed to meet and discuss the study also granted our request to move forward with the research. The housing authorities provided us with letters of support. In the one city where the local housing authority did not respond to our invitation, the invitation was extended to the director of a community center that served the two housing developments in that city. The director of the community center accepted our invitation to meet and discuss the study. The director then forwarded our request to the department of parks and recreation for approval. Approximately 1 week later, the director of the community center informed the PI that the request had been approved. The department of parks and recreation also provided a letter of support. Despite the endorsement from parks and recreation, the research team continued to notify the local housing authority of our research in their properties. Eventually, the local housing authority provided verbal support. They also provided the PI with descriptive information on residents in their housing developments.

To avoid placing a gratuitous burden on local housing authorities, they played the roles of advising and approving agents. Local housing authorities were not involved in recruitment or survey implementation. This approach was employed to increase the veracity of youths' responses and to minimize systematic error in youths' self-reports of their behavior within the housing development. Furthermore, because some housing authorities have

zero-tolerance laws, we saw excluding housing authorities from data collection as part of our obligation to protect human participants in research.

Although local housing authorities were excluded from actual data collection, they were important in three specific ways. First, local housing authorities informed the PI of the dynamics within the housing developments, such as current crime trends and challenges faced by residents. Second, local housing authorities helped to identify young resident leaders, key social service agencies, and directors of community centers. Third, local housing authorities provided socioeconomic and demographic information on families and structural information on each housing development.

ROLE OF COMMUNITY CENTERS AND SERVICE PROVIDERS

After receiving the endorsements from local housing authorities, the PI identified and contacted community centers and social service agencies in or adjacent to the targeted housing developments. Priority was given to community centers and agencies in close proximity to the targeted developments and those identified by local housing authorities as frequented by residents. Once contacted, the PI or a senior RA met with directors to garner their support and to discuss their potential role in the study. During the meeting, directors were asked to provide space for data collection and to disseminate information on the study throughout the housing development. Strategies to increase the participation and accuracy of participant response were also discussed. In three cities, community/recreation centers provided space for data collection and disseminated information on the study. In one city, a social service agency provided space for data collection and disseminated information on the study. Prior to data collection, directors of community agencies provided feedback on the research protocol and questionnaire.

Once approval for data collection was secured, the research team identified spaces within the community agencies to facilitate data collection. It should be noted that the research sites could not provide similar accommodations for data collection. The physical layout of participating agencies differed significantly across research sites. Some agencies were able to provide more privacy than others. Some agencies were able to accommodate youth who requested privacy, whereas at other agencies this option was unavailable. Furthermore, in two housing developments (site 3 in St. Louis and site 2

in Washington, DC), community centers were unavailable during data collection. Data collection therefore occurred in an open-air common space located in the housing development. The diverse floor plans of participating agencies caused slight variations in data collection across developments.

In addition to hosting data collection, the participating agencies held information sessions for interested youth and community stakeholders. An RA facilitated the information sessions. Information sessions covered the researchers' institutional affiliations, the purpose of the study, the risks and benefits of the study, rights as a human participant in research, participants' right to withdraw from the study at any time and the right to refuse to answer any questions, and contact information for the PI and the institutional review boards at Washington University and Howard University. Furthermore, flyers were distributed at information sessions. Flyers contained the purpose of the study and the date/location for data collection. Flyers also contained contact information on the PI, an RA, and a contact person at the host agencies. Each community-based agency received an honorarium for their participation in this study.

At least one employee of the community agency acted as our contact person and agency liaison. Agency liaisons were familiar with the youth in the targeted housing developments, and the youth were familiar and fairly comfortable with the agency liaison. The primary duties of the agencies' liaisons were as follows: 1) posting the flyers in the host agency, 2) collecting contact information on youth interested in the study, 3) ensuring the research team had access to the host agency during data collection, 4) maintaining order and keeping youth organized during data collection, and 5) minimizing repeat cases (i.e., preventing youth from completing the survey a second time only to obtain the cost incentive). Agency liaisons received a stipend for their service.

THE ROLE OF RESIDENTS

The PI hired two community liaisons at each housing development. Typically, community liaisons were African Americans in their early to mid-twenties who had lived in the housing development for 5 years or more and were well known throughout the housing development. Community liaisons differed from agency liaisons in that community liaisons were not employed at the community-based organizations. Each community liaison

received brief training in the research protocol and various methods of recruitment. All community liaisons received a stipend for their service. In addition to official community liaisons, youth RAs were retained on an ad-hoc basis. Youth RAs assisted the research team with distributing flyers, recruitment cards, and, on rare occasions, letters to parents. Ad-hoc youth RAs were typically 13 to 15 years of age. They also received a small stipend per diem.

Community liaisons were essential to gaining access to this difficult-to-reach population of youth. Community liaisons were also critical to the research team's legitimacy in the housing development. Prior to data collection, community liaisons posted flyers throughout their housing developments. They also distributed recruitment cards, which contained the purpose of the study and contact information for the host agency liaison.

During data collection, the community liaisons and ad-hoc youth RAs ensured that youth were residents in the housing development and that youth in the housing development knew the location of the data collection host agency. Community liaisons also helped the graduate student RAs with distribution of parental consent and youth assent forms. They were also helpful with distributing pens and blank questionnaires to youth who provided signed parental consent, youth assent, or informed consent. Community liaisons and ad-hoc RAs did not have access to completed surveys. Community liaisons were essential to the success of this project.

When youth gathered at the host agencies for information sessions, community liaisons helped to translate the confidentiality and the rights of human subjects in research clauses into the communities' vernacular. During data collection, they were vital in conveying the message that the local housing authority had no role in data collection, that any information available to housing authorities would be deidentified, and that all questionnaires would receive an identification number. Without their support and community ties, this study would not be possible.

PROCEDURES

Data were collected from 898 youth ages 11 to 21 living in nine public housing neighborhoods located in four large U.S. cities. Three housing developments were in St. Louis; two housing developments were in Washington, DC; two housing developments were in New York City (Queens); and two

housing developments were in North Philadelphia. At six of the nine sites, data collection took place in community centers located in or adjacent to the housing development. At two of the nine sites, data collection occurred in an open-air common space on the grounds of the housing development. At one of the nine sites, data collection took place in a nonprofit organization located between two housing developments.

SAMPLE POOL

Inclusion Criteria

Participation was restricted to youth who lived in family-only developments. Inclusion criteria included the following: 1) current residency in the targeted housing developments and 2) being between the ages of 13 and 21 years. The architectural structure of the housing developments included high-rise, low-rise garden style, and barrack-style developments.

Exclusion Criteria

Youth in elderly and disabled housings, HOPE VI developments, and Section 8 apartments were excluded from this study. Also, youth who could not demonstrate the capacity to give informed assent were excluded from the study. Youth were screened using the Capacity to Consent Screen (Zayas, Cabassa, & Pérez 2005). The Capacity to Consent Screen measures a participant's capacity to give informed consent by assessing whether they understand the purpose of the research project, how data will be collected, their rights as a study participant, and that they can cease their participation at any time without consequences.

Only youths who responded correctly to eight or more questions participated in the study. The interviewer administrated the screen three times to obtain the necessary eight correct answers (cumulatively after providing informed consent instructions three times). If the youth failed to achieve a score of 8 after the third time, then the youth was escorted from the room and a member of the research team explained to the youth that he did not meet the requirements for participating. The youth was offered a snack and thanked for his or her willingness to participate. Only two youth, both males (ages 13 and 14), did not meet the capacity-to-consent criteria.

RECRUITMENT

Recruitment consisted of flyers and announcements at local community centers. Specifically, members of the research team, agency liaisons, and community liaisons posted flyers in the housing developments, in community centers, and in agencies around the housing developments. In addition, recruitment cards were distributed to youth living in the communities. The flyers and recruitment cards included a brief overview of the study, the date and location for data collection, and contact information for the PI and RA and agency liaisons.

A different recruitment strategy was employed to recruit youth who were identified by community liaisons as "youth on the block" (i.e., youth who rarely visited community/recreation centers because they were heavily involved in delinquency, drug use, or the drug exchange). These youth on the block were also identified during a walk-through observation in each housing development. Once youth on the block were identified, the PI, an RA, and a community liaison approached what appeared to be the senior member (i.e., the O.G.) of the group. During our conversation with the O.G., the PI identified himself as a researcher and explained his institutional affiliation, disclosed his practice experiences with families in public housing, discussed the purpose of the study, and also shared the critical need to include the voices of "youth on the block" in public housing research. The PI also emphasized how the results of the study may have applications for integrating "youth on the block" back into the community. This approach consistently yielded fruitful recruitment across cities and housing developments. It should be noted, however, that the PI, RA, and community liaison were all African American males with social work practice experiences, personal life experiences, or both in urban public housing neighborhoods. If this approach is replicated in subsequent studies, it should be done with caution and include community liaisons and researchers who are familiar with the vernacular and cultural norms of life in urban public housing neighborhoods.

DATA COLLECTION

Prior to data collection, RAs underwent two trainings. First, RAs were trained in instrument implementation. All community liaisons also received this training. Second, RAs were trained in culturally and

contextually appropriate behavior given the research settings. At each data collection session, trained African American graduate students (RAs) and a community liaison explained the purpose of the study, risks and benefits of the study, the purposes of informed consent and assent, confidentiality, and that participants were free to drop out of the study at any time without penalty or consequences. After reviewing the purpose of the study, trained community liaisons distributed parental consent/youth assent forms to potential participants who were 17 years of age and younger for their parents' review and signatures. Potential participants aged 18 and older received informed consent for their review and signature. Once parental consent/youth assent or informed consent was obtained, groups of 8 to 10 youth were assembled to complete the Capacity to Consent Screen (Zayas, Cabassa, & Pérez 2005). Youth who demonstrated the capacity to give consent were gathered in small groups of 15 to 20 and directed to designated tables to complete the questionnaire. Once assembled at designated tables, members of the research team reiterated the purpose of the study and gave each participant the survey and a pen.

Trained graduate students were present to assist youth where needed and to minimize missing data while youth completed surveys. Also, a licensed clinical social worker was present at each data collection session to administer brief counseling and referrals if youth experienced discomfort while completing the questionnaire. Each participant received a cash incentive of $15. On average, it took approximately 40 minutes to complete the survey. All questions and answers were read aloud and participants circled their desired response. Participants who demonstrated acceptable reading level and high comprehension on the Capacity to Consent Screen completed their questionnaires independently. Youth were provided with a comfortable location to complete the surveys. Youth were provided a snack (pizza and soda) after completing the surveys. Debriefing sessions were held while youth ate their snacks.

Data collection was confidential but not anonymous. The PI obtained contact information on all participants who consented to provide contact information. This method was employed to facilitate subsequent studies and to help clean the data if needed. Human subjects guidelines were strictly observed to ensure the safety and protect the identity of study participants. Parental consent and youth assent were obtained using standardized informed consent and youth assent forms as approved by Washington University and Howard University.

The recruitment efforts yielded a sample of 898 youth living in nine public housing developments across four U.S. cities. The average age of the sample was 15.4 years, with a standard deviation of 2.3 years. Fifty-two percent of the sample was female. Tables 4.1 through 4.4 provide a full description of all demographic and study variables, as well as comparisons between gender and across the four cities.

TABLE 4.1 Descriptive Analysis of Demographic Variables and Comparison by Gender

VARIABLES	FULL SAMPLE					
	n	RANGE	% OR *x*-MEAN	FEMALES (*n* = 426)	MALES (*n* = 468)	t/χ^2
Age, mean years (SD)	898	11–20	15.4 (2.3)	15.27 (2.3)	15.60 (2.3)	–2.13 (89)**
Gender (%)	897			47.7	52.3	10.56***
City (%)	898					NS
New York City	347		38.6	40.8	36.8	
Washington, DC	164		18.3	15.5	20.9	
St. Louis	238		26.5	26.5	26.7	
Philadelphia	149		16.6	17.1	15.6	
Participant's race (%)	896					NS
Asian, Asian American	4		0.4	0.2	0.6	
Black non-Hispanic	782		87.3	87.3	87.1	
Hispanic or Latino	16		1.8	2.1	1.5	
Mixed	85		9.5	10.3	8.8	
Native American	1		0.1	0.0	0.2	
White non-Hispanic	8		0.9	0.0	1.7	
Maternal caregiver's race (%)	653					14.29*
Asian, Asian American	13		1.4	0.3	3.2	
Black non-Hispanic	541		60.2	81.6	84.1	
Hispanic or Latino	39		4.3	8.1	4.1	
Mixed	7		0.8	5.8	4.7	
Native American	8		0.9	1.3	1.2	
Other	34		3.8	1.3	2.1	
White non-Hispanic	11		1.2	1.6	0.6	

TABLE 4.1 (*Continued*)

VARIABLES	FULL SAMPLE			FEMALES ($n = 426$)	MALES ($n = 468$)	t/χ^2
	n	RANGE	% OR x-MEAN			
Paternal caregiver's race (%)	655					NS
Asian, Asian American	12		1.3	0.6	2.9	
Black non-Hispanic	544		60.6	83.0	82.9	
Hispanic or Latino	33		3.7	6.4	3.8	
Mixed	7		0.8	5.8	4.4	
Native American	5		0.6	0.3	1.2	
Other	33		3.7	3.2	3.2	
White non-Hispanic	21		2.3	0.6	1.5	
Household characteristics						
Mean household size (SD)	549	1–16	4.7 (2.1)	4.75 (2.1)	4.79 (2.1)	NS
Maternal caregiver's status (% biological parent)	648		82.5	86.1	79.6	4.70*
Paternal caregiver's status (% biological parent)	640		68.3	68.5	68.2	NS
Both parents in home (% yes)	269		43.0	39.5	46.3	NS
Mother only in home (% yes)	508		79.7	80.5	79.5	NS
Father only in home (% yes)	357		56.4	50	62	9.19**
Mother's immigration status (% U.S. citizen)	598		94.2	95.6	95.4	NS
Father's immigration status (% U.S. citizen)	572		89.7	94.9	91.1	NS
Tenure in the public housing development, mean years (SD)						
Nuclear family	461	0.16–42	13 (12)	14.1 (12.4)	13.1 (10.8)	NS
Extended family	528	0.08–50	14 (11)	15.4 (15.5)	13.78 (15.7)	NS

NS, not significant; *$p < .05$, **$p < .001$, ***$p < .000$.

TABLE 4.2 Descriptive Analysis of Study Variables and Comparisons by Gender

FACTORS	FULL SAMPLE			FEMALES (n = 426)	MALES (n = 468)	t/χ^2
	n	RANGE	% OR MEAN (SD)			
Individual factors						
General perceived self-efficacy	660	10–40	24.4 (8.7)	25.64 (8.1)	23.24 (9.1)	3.55***
Depressive symptoms	897	0–51	17.4 (9.8)	16.6 (9.7)	18.2 (9.8)	–2.45
Anxiety sensitivity	497	16–48	27.4 (7.3)	27.6 (6.9)	27.1 (7.6)	NS
Impact of Events Scale (posttraumatic stress disorder)	656	13–52	25.0 (10.4)	26.6 (10.9)	23.5 (9.6)	3.87***
Attitude toward deviance	898	14–56	46.4 (9.8)	47.9 (9.3)	45.0 (10.0)	4.36***
Self-reported delinquency	898	14–63	21.2 (8.9)	19.2 (6.9)	23.0 (10.0)	–6.45***
Adultification	848	2–10	6. 7 (2.2)	6.97 (2.2)	6.59 (2.2)	2.42***
Have tried ATOD[a]	636	0–1	62.1%	62.3%	63.3%	NS
Attitude towards ATOD use	631	3–12	5.21 (3.4)	4.97 (3.3)	5.42 (3.5)	NS
Intent to use ATOD in adulthood	514	3–9	4.63 (1.8)	4.48 (1.6)	4.77 (1.9)	NS
Prevalence of ATOD use	630	3–18	4.9 (3.21)	4.65 (2.8)	5.31 (3.4)	–2.62**
Ever had sex (% yes)	627	0–1	47.7%	33.2%	60.9%	47.82***
Age of onset of sex	301	11–19	13.9 (2.0)	15.1 (1.7)	13.2 (1.8)	8.73***
3-month sex partner prevalence	281	0–30	2.49 (3.5)	1.34 (3.0)	3.19 (3.7)	–4.56***
Lifetime sex partner prevalence	281	0–50	6.08 (7.5)	3.15 (3.7)	7.84 (8.6)	–6.24***
Use condoms during sex (% yes)	338	0–1	88.5%	93.9%	88.5%	NS
Used drugs during sex (% yes)	642	0–1	13.4%	11.4%	17.9	NS
Contraceptives to prevent pregnancy (% yes)	334	0–1	64.7%	68.4%	62.9%	NS

TABLE 4.2 (*Continued*)

FACTORS	FULL SAMPLE					
	n	RANGE	% OR MEAN (SD)	FEMALES (*n* = 426)	MALES (*n* = 468)	t/χ^2
Peer factors						
Group of close friends	873	0–1	82.30%	82.60%	82.10%	NS
Peer influence	898	9–45	28.95 (6.47)	29.40 (6.4)	28.54 (6.4)	1.98*
Peer's behavior	898	14–70	25.95 (10.5)	23.46 (9.1)	28.16 (11.2)	–6.89***
Parental and household factors						
Quality of parent–youth relationship	898	15–47	34.13 (5.71)	35.50 (5.3)	32.91 (5.8)	6.95***
Maternal encouragement	898	7–28	21.40 (5.36)	22.36 (5.1)	20.54 (5.4)	5.13***
Paternal encouragement	898	7–28	18.76 (6.71)	18.80 (6.9)	18.72 (6.5)	NS
Maternal monitoring	660	5–20	14.57 (4.06)	15.22 (3.9)	14.00 (41)	3.88***
Paternal monitoring	660	5–20	12.02 (5.04)	11.60 (5.1)	12.40 (4.9)	–2.02*
Exposure to household conflict	660	10–40	14.24 (5.43)	13.66 (4.9)	14.72 (5.7)	–2.49**
Contextual factors						
Living in high-rise	435	0–1	48.4%	50.0%	47.2%	NS
Community disorganization	898	15–60	38.7 (6.1)	39.30 (5.7)	38.19 (6.5)	2.70**
Community cohesion	898	03–12	6.1 (1.9)	6.07 (1.8)	6.28 (2.0)	NS
Witnessing community violence	660	13–52	23.5 (7.3)	23.35 (7.0)	23.74 (7.7)	NS
Victimization by community violence	660	13–48	19.9 (6.5)	19.42 (6.0)	20.41 (6.8)	NS

NS, not significant; ATOD, alcohol, tobacco, and other drug use; *$p < .05$, **$p < .001$, ***$p < .000$.

MEASUREMENT INSTRUMENTS

Participants completed a survey composed of several standardized instruments previously used with minority youth. The survey assessed youths' perceptions of the neighborhood domain (the housing development), the household domain, the peer domain, and a range of externalizing behaviors and internalizing symptoms.

TABLE 4.3 Descriptive Analysis of All Study Variables and Comparisons by City

VARIABLES	TOTAL SAMPLE			NEW YORK CITY	WASHINGTON, DC	ST. LOUIS	PHILADELPHIA	*F* TEST/ χ^2
	n	RANGE	%/$\bar{\chi}$					
Research sites	898	1–4		348 (38.6%)	164 (18.3%)	238 (26.5%)	149 (16.6%)	109.34***
Age	898	11–20	15.4 (2.3)	15.0 (SD 2.3)	15.8 (SD 3)	15.6 (SD 2.0)	15.6 (SD 2.4)	5.39**[a,c]
Gender (% male)	897	0–1	47.7%	174 (50%)	66 (40.2%)	113 (47.4%)	73 (48.9%)	NS
Participant's race	896	1–6						65.69***
Asian, Asian American	4		0.4	2 (0.2%)	2 (0.2%)	0	0	
Black non-Hispanic	782		87.3	282 (31.5%)	127 (14.2%)	237 (26.5%)	136 (15.2%)	
Hispanic or Latino	16		1.8	12 (1.3%)	3 (0.3%)	0	1 (0.1)	
Mixed	85		9.5	45 (5.0%)	29 (3.2%)	0	11 (1.2%)	
Native American	1		0.1	1 (0.1%)	0	0	0	
White non-Hispanic	8		0.9	3 (0.3%)	3 (0.3%)	1 (0.1%)	1 (0.1%)	
Paternal caregiver's race	655	1–7						41.39***
Asian, Asian American	12		1.3%	6 (0.9%)	4 (0.6%)	ND	2 (0.3%)	
Black non-Hispanic	544		60.6%	262 (40%)	154 (23.5%)	ND	128 (9.5%)	
Hispanic or Latino	33		3.7%	26 (4%)	1 (0.2%)	ND	6 (0.9%)	
Mixed	7		0.8%	27 (4.1%)	0	ND	6 (0.9%)	
Native American	5		0.6%	5 (0.8%)	0	ND	0	
Other	33		3.7%	16 (2.4%)	2 (0.3%)	ND	3 (0.5%)	
White non-Hispanic	21		2.3%	3 (0.5%)	1 (0.2%)	ND	3 (0.5%)	
Maternal caregiver's race	653	1–7						60.29***
Asian, Asian American	13		1.4%	6 (0.9%)	3 (0.5%)	ND	4 (0.6%)	
Black non-Hispanic	541		60.2%	253 (38.7%)	151 (23.1%)	ND	137 (21%)	
Hispanic or Latino	39		4.3%	38 (5.8%)	1 (0.2%)	ND	0	

Mixed	7		0.8%	29 (4.4%)	2 (0.3%)	ND	3 (0.5%)	
Native American	8		0.9%	4 (0.6%)	3 (0.5%)	ND	1 (0.2%)	
Other	34		3.8%	8 (1.2%)	2 (0.3%)	ND	1 (0.2%)	
White non-Hispanic	11		1.2%	6 (0.9%)	0	ND	1 (0.2%)	
Household characteristics								
Household size	549	1–16	4.7 (2.1)	4.9 (2.3)	4.5 (1.7)	ND	4.5 (1.6)	NS
Maternal caregiver's status (% biological parent)	648	1–6	79.8%	286 (83%)	123 (78%)	ND	108 (73%)	19.45*
Paternal caregiver's status (% biological parent)	640	1– 6	58%	201 (59%)	86 (56%)	ND	84 (57%)	24.83**
Both parents in home (% yes)	269	1–2	43.0%	161 (48.4%)	54 (35.7%)	ND	54 (38%)	13.74**
Mother in home (% yes)	508	1–2	79.7%	303 (89.3%)	97 (62.5%)	ND	108 (75.5%)	49.34***
Father in home (% yes)	357	1–2	56.4%	182 (54.3%)	101 (64.7%)	ND	74 (52.1%)	6.06*
Mother's immigration status (% U.S. citizen)	598	1–3	94.2%	313 (91.7%)	150 (98.6%)	ND	135 (95%)	9.67*
Father's immigration status (% U.S. citizen)	572	1–3	89.7%	294 (86.2%)	146 (94.2%)	ND	132 (93%)	11.32*
Tenure of nuclear family	461	0.16–42	13 (12)	15.75 (13.43)	10.1 (6.04)	ND	8.5 (8.61)	18.54***[a,d]
Tenure of extended family	528	0.08–50	14 (11)	16.91 (11.33)	9.58 (7.91)	ND	7.5 (6.62)	16.80***[a,d,e]

ND, no data; NS, not significant; *$p < .05$, **$p < .001$, ***$p < .000$.

[a] Classes 1 and 2 are different.

[b] Classes 2 and 3 are different.

[c] Classes 1 and 3 are different.

[d] Classes 1 and 4 are different.

[e] Classes 2 and 4 are different.

[f] Classes 3 and 4 are different.

TABLE 4.4 Descriptive Analysis of All Study Variables and Comparisons by City

VARIABLES	TOTAL SAMPLE			NEW YORK CITY ($n = 348$)	WASHINGTON, DC ($n = 164$)	ST. LOUIS ($n = 238$)	PHILADELPHIA ($n = 149$)	F TEST/χ^2
	n	RANGE	%/$\overline{\chi}$					
Individual factors								
General perceived self-efficacy	660	10–40	24.4 (8.7)	25.07 (7.94)	23.38 (9.94)	ND	24.01 (8.75)	NS
Depressive symptoms	897	0–51	17.4 (9.8)	15.82 (9.0)	16.15 (8.3)	18.93 (11.17)	20.45 (10.11)	10.79***b,c,d,e
Anxiety sensitivity	497	16–48	27.4 (7.3)	22.81 (4.8)	ND	31.27 (7.2)	24.62 (5.6)	88.89***c,f
Impact of Events Scale (posttraumatic stress disorder)	656	13–52	25.0 (10.4)	24.8 (10.1)	23.7 (10.9)	ND	25.9 (10.8)	NS
Attitude toward deviance	898	14–56	46.4 (9.8)	46.39 (9.1)	45.65 (11.39)	46.82 (9.16)	46.43 (9.82)	NS
Self-reported delinquency	898	14–63	21.2 (8.9)	20.86 (8.24)	23.09 (9.95)	19.63 (8.63)	22.61 (9.14)	6.44***a,b,f
Adultification	848	2–10	6.7 (2.2)	6.50 (2.32)	6.83 (2.36)	6.89 (2.26)	7.16 (2.19)	3.19*d
Have tried ATOD (% yes)	636	0–1	62.1%	69.7%	53.3%	ND	56.3%	15.45***
Attitude towards ATOD use	631	3–12	5.21 (3.4)	4.64 (3.14)	7.19 (4.08)	ND	4.51 (2.44)	36.06***a,e
Intent to use ATOD in adulthood	514	3–9	4.63 (1.8)	4.52 (1.7)	4.68 (2.2)	ND	4.85 (1.9)	NS
Prevalence of ATOD use	630	3–18	4.9 (3.21)	4.56 (2.51)	5.35 (3.72)	ND	5.59 (3.92)	6.64**a,d
Ever had sex (% yes)	627	0–1	47.7%	44.1%	57.5%	ND	45.6%	7.92**
Age of onset of sex	301	11–19	13.9 (2.0)	14.11 (1.9)	13.87 (2.2)	ND	13.82 (1.9)	NS
3-month sex partner prevalence	281[g]	0–30	2.49 (3.5)	2.07 (2.8)	2.51 (3.0)	ND	3.20 (4.8)	NS
Lifetime sex partner prevalence	281[g]	0–50	6.08 (7.5)	6.03 (7.3)	5.14 (5.8)	ND	7.10 (9.1)	NS
Use condoms during sex (% yes)	338	0–1	88.5%	95.5%	79.5%	ND	85.3%	15.29***
Used drugs during sex (% yes)	642	0–1	13.4%	7.3%	22.7%	ND	18.1%	25.39***
Contraceptives to prevent pregnancy (% yes)	334	0–1	64.7%	68%	57.1%	ND	66%	NS

Peer factors								
Group of close friends (% yes)	873	0–1	82.4%	90%	79.2%	73.1%	83.1%	28.63***
Peer influence	898	9–45	28.9 (6.4)	29.2 (6.0)	28.96 (7.4)	28.42 (6.6)	29.1 (6.0)	NS
Peer's behavior	898	14–70	25.9 (10.5)	25.1 (9.1)	26.1 (10.5)	26.5 (12.5)	26.7 (10.5)	NS
Parental and household factors								
Quality of parent–youth relationship	898	15–47	34.1 (5.7)	34.3 (5.8)	33.1 (6.0)	34.8 (5.4)	33.6 (5.1)	3.26*[b]
Maternal encouragement	898	7–28	21.4 (5.3)	21.7 (5.2)	21.0 (5.6)	21.2 (5.0)	21.1 (5.7)	NS
Paternal encouragement	898	7–28	18.7 (6.7)	18.9 (6.7)	18.2 (7.0)	18.5 (6.3)	19.2 (6.7)	NS
Maternal supervision	660	5–20	14.5 (4.0)	14.7 (3.8)	14.1 (4.2)	ND	14.2 (4.3)	NS
Paternal supervision	660	5–20	12.0 (5.0)	11.8 (5.1)	12.1 (4.9)	ND	12.1 (4.8)	NS
Exposure to household conflict	660	10–40	14.2 (5.4)	13.2 (4.8)	14.2 (5.3)	ND	16.5 (6.1)	20.98***[d,e]
Contextual factors								
Living in high-rise	485		54%	100%	0	37%	ND	
Community disorganization	898	15–60	38.7 (6.1)	39.2 (5.7)	36.4 (7.3)	38.1 (5.7)	40.9 (5.6)	15.70***[a,b,d,e,f]
Community cohesion	898	3–12	6.1 (1.9)	5.8 (1.8)	6.6 (2.0)	6.3 (2.0)	6.2 (1.8)	6.58***[a,b]
Witnessing community violence	660	13–52	23.5 (7.3)	22.3 (6.3)	23.0 (7.6)	ND	26.9 (8.1)	22.04***[e,d]
Victimization by community violence	660	13–48	19.9 (6.5)	18.9 (5.8)	19.6 (6.4)	ND	22.4 (7.3)	15.63***[e,d]

ND, no data; NS, not significant; ATOD, alcohol, tobacco, and other drug use; *$p < .05$, **$p < .001$, ***$p < .000$.

[a] Classes 1 and 2 are different.

[b] Classes 2 and 3 are different.

[c] Classes 1 and 3 are different.

[d] Classes 1 and 4 are different.

[e] Classes 2 and 4 are different.

[f] Classes 3 and 4 are different.

[g] Youth with scores over 3 SD above the mean were dropped.

Community Domain

PERCEIVED NEIGHBORHOOD

The Subjective Neighborhood (SN) scale was used to assess the youths' subjective appraisal of their neighborhoods. The use of this scale builds upon previous studies (Aneshensel & Sucoff 1996). The SN scale is a 22-item Likert scale that list attributes of a neighborhood. Responses on this scale range from *strongly disagree* (1) to *strongly agree* (4). Aneshensel and Sucoff (1996) identified two subscales of the SN: ambient hazard and social cohesion. In their sample, ambient hazard had excellent reliability ($\alpha = .90$) and social cohesion had acceptable reliability ($\alpha = .64$) (Aneschensel & Sucoff 1996).

To build on this work, the two components (ambient hazard and social cohesion) of the SN scale were tested for reliability. The ambient hazard subscale asked youth to report on the following risk factors in their neighborhood: violent crimes, drive-by shootings, gang fights, drug use and dealing, property crimes, graffiti, police harassment for no reason, whether the houses are clean (reverse scored), whether the neighborhood is safe (reverse scored), and whether the houses are in good shape (reverse scored). This subscale demonstrated acceptable reliability ($\alpha = .64$) with the current sample. The social cohesion subscale asked youth to report on three aspects of social cohesion among individuals living in their neighborhood: people are friendly here, youth know each other here, and adults know each other here. This subscale also demonstrated acceptable reliability ($\alpha = .61$).

EXPOSURE TO COMMUNITY VIOLENCE

Community violence was assessed using the Survey of Exposure to Community Violence: Self-Report Version (Richters & Martinez 1990). This 26-item Likert scale measures several types of violence. Examples of items included in the scale are "How many times have you yourself actually been threatened with serious physical harm by someone?" or "How many times have you seen someone else being sexually assaulted, molested, or raped?" Both direct (victimization) and indirect (witnessing) community violence were assessed. Items ask youth how many times each violent event occurred; responses range from *never* (1) to *many times* (4). Items are summed so that higher scores represent greater exposure to community violence.

The victimization and witnessing subscales demonstrated acceptable internal consistency with the current sample ($\alpha = .84$ and .85, respectively).

Household Domain

PARENTAL MONITORING

To assess parental monitoring, warmth, and involvement, youth completed the Parental Attitude Measure (PAM; Lamborn et al. 1991). This 17-item scale assesses two aspects of parenting behaviors: monitoring and encouragement. The five-item parental monitoring subscale asks youth: "How much do your parents really know who your friends are?" Items are scored on a four-point Likert scale ranging from *don't know* (1) to *know exactly* (4). The PAM scale was modified into a 10-item scale to measure both paternal and maternal monitoring. The subscale demonstrated acceptable reliability ($\alpha = .76$) with the current sample. Jordan (2003) reported adequate reliability ($\alpha = .69$) when using this subscale with a sample of urban African American youth.

The 12-item parental encouragement subscale assesses both maternal and paternal encouragement. This subscale asks youth, "Does your father/mother, stepfather/stepmother, or the man/woman who takes care of you push you to do your best in whatever you do?" Items are scored on a four-point Likert scale ranging from *never* (1) to *always* (4). The 12-item scale demonstrated good reliability ($\alpha = .88$) with the sample of inner-city African American adolescents in the current study. PAM is scored by summing the items, with higher values indicating higher levels of supervision and encouragement.

PARENT–CHILD RELATIONSHIP

Parent–child relationship was measured using a four-item subscale from the Quality of Parental Relationship Scale from the National Youth Survey (Elliot 1987). The subscale assesses youths' perception of the quality of their relationships with their parents. For example, respondents are asked, "How satisfied are you with your relationship with your parents?" Responses range from *very dissatisfied* (1) to *very satisfied* (5). Another example is, "How much warmth and affection do you receive from your parents?" Responses range from *very little* (1) to *a great deal* (5). The measure is summed so that higher scores represent a higher-quality parent–child relationship.

The subscale demonstrated acceptable internal consistency with the current sample ($\alpha = .76$).

FAMILY/HOUSEHOLD CONFLICT

Family/household conflict was assessed using the Family Conflict Scale (Barbarin, Richter, deWet 2001), which is a subscale of the Family Relations Scale. The Family Conflict Scale measures exposure to violence and conflict within the household. Responses are rated on a four-point Likert scale ranging from *never* (1) to *many times* (4). Items are summed so that higher scores represent greater exposure to domestic violence and conflict. Acceptable psychometric properties have been reported, with a Cronbach's alpha of .85 and test-retest reliability coefficient of .90 (Barbarin, Richter, & deWet 2001). Item analyses indicated that questions measuring exposure to violence were highly correlated with questions for illicit drug use and victims of crime and violence. In this study, this measure was used to assess the degree to which the youth experience violence and conflict in their current households.

CAREGIVER'S STATUS

Caregiver's status was assessed using two items. The first item states, "In my household, the person I consider to be my mother is..." The answer choices were as follows: *my biological mother* (e.g., your natural mother who had you; score of 1), *my stepmother* (2), *a relative* (e.g., uncle, grandmother; 3), *an adult who is not related to me* (e.g., foster parent, or none of the people I live with; 4), and *I live alone* (5). The second item states, "In my household, the person I consider to be my father is..." The answer choices were as follows: *my biological father* (e.g., your natural father; score of 1), *my stepfather* (2), *a relative* (e.g., uncle, grandfather; 3), *an adult who is not related to me* (e.g., foster parent; 4), and *I live alone* (5).

Peer Domain

EXPOSURE TO DELINQUENT PEERS

The Exposure to Delinquent Peers scale from the National Youth Survey (Elliot 1987) was used to measure respondents' friends' involvement in delinquent behavior. This scale asked youth the number of their close friends who have engaged in various types of delinquent behaviors over

the past year. The delinquent behaviors assessed by this measure ranged from "alcohol use" to "pressured someone to have sex with them." The responses categories for the items ranged from *all of them* (5) to *none of them* (1). The reliability for this 14-item scale was excellent ($\alpha = .93$). Items are scored so that a higher score indicates greater exposure to delinquent peers (Elliot 1987).

PEER INFLUENCE

Peer influence was assessed using the Peer Influence subscale from the National Youth Survey (Elliot 1987). This scale measures the degree to which respondents' peers have influenced their thinking and behavior. This six-item subscale asks youth, "How much have your friends influenced what you think?", "How much would you like to be like your friends?", and "How much shared interest and activities do you have with your friends?" Items are rated on a five-point Likert scale ranging from *not very much* (1) to *very much* (5). Higher scores indicate more influential peers. The scale demonstrated accepted internal consistency with this sample ($\alpha = .76$).

Individual Domain

DELINQUENCY

The Self-Reported Delinquency scale is a 20-item subscale from the National Youth Survey (Elliot 1987). Youth respondents were asked to report the frequency with which they engaged in a variety of delinquent behaviors in the last year. In the original survey, each item consisted of two parts: raw frequency and rate (number of times per day). In the present study, only raw frequencies were collected, with the highest category scored as 12 or more times. This approach builds on other studies (Warr & Stafford 1993). To assess the extent to which youth engage in delinquent behavior, respondents were asked the question, "From January 2004 until today, did you ever [commit the act in question]?" Delinquent acts ranged from "steal something worth less than $5" to "attack someone with the idea of seriously hurting or killing them." Responses were *12 or more times* (4), *3 to 11 times* (3), *1 or 2 times* (2), and *never* (1). The Self-Reported Delinquency scale demonstrated excellent reliability with the present sample ($\alpha = .95$). Items are scored so that a higher score reflects greater involvement in delinquent behavior (Elliot 1987).

HEALTH-RISK BEHAVIOR

Drug use and sexual behavior were assessed using the Centers for Disease Control and Prevention (CDC) Youth Risk Behavior Survey (YRBS). The CDC developed the YRBS in collaboration with federal, state, and private-sector partners for use in a national survey for the Youth Risk Behavior Surveillance System. The questions, which were tied to national health objectives for 2010, focus on priority health-risk behaviors established during youth that result in the most significant mortality, morbidity, disability, and social problems during both youth and adulthood (Centers for Disease Control and Prevention 2001). Modifications of the questions on alcohol use, tobacco use, illegal drug use, suicidality, and acquired immunodeficiency syndrome risk behaviors were used in this study. The YRBS was administered in 1990 and has been widely used with youth of color. The CDC provides coding, scoring, and comparative data at the local and national levels for this survey instrument (Centers for Disease Control and Prevention 2011).

SELF-EFFICACY

Self-efficacy was measured using the General Perceived Self-Efficacy Scale (Schwarzer & Jerusalem 1995). This 10-item scale measures a broad and stable sense of personal competence to deal with a variety of life situations. Respondents are asked how true the following statements are: "When I am faced with a problem, I can find several solutions" or "I am confident that I could handle unexpected events." Responses range from *not true at all* (1) to *true all of the time* (4). Items are summed with higher scores representing greater general perceived self-efficacy. The measure demonstrated acceptable internal consistency with this sample ($\alpha = .92$).

DEPRESSIVE SYMPTOMS

Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D has been used extensively for assessing depression and psychiatric epidemiology (Murphy 2002; Naughton & Wiklund 1993; Nezu et al. 2002; Snaith 1993). CES-D is a 20-item scale that assesses mood, somatic complaints, social interactions with others, and motor functioning. Responses are rated on a four-point Likert scale ranging from *rarely or none of the time (less than one day*; score of 0) to *most*

or all of the time (5 to 7 days; score of 3). The final score spans from 0 to 60, with a higher score indicating greater impairment. Respondents with a final score of 16 or higher are typically identified as having depression.

Although a cutoff point of 16 has been used in adult samples, this definition has yielded an estimated prevalence of adolescent depression of more than 50 percent (Nebbitt & Lombe 2007; Rushton, Forcier, & Schectman 2002). Roberts, Lewinsohn, and Seely (1991) suggested a cutoff of 24 for adolescents' score on the basis of improved ability to detect depression as defined by the *Diagnostic and Statistical Manual of Mental Disorders*. Among community samples, internal consistency estimates range from .80 to .90 (Devins et al. 1988; Nebbitt & Lombe 2007; Radloff 1977). The CES-D demonstrated acceptable reliability with the current adolescent sample ($\alpha = .88$).

ANXIETY

Anxiety was assessed using the Anxiety Sensitivity Index (ASI). The ASI is a 16-item self-report scale that assesses threatening beliefs about arousal (Peterson & Reiss 1987). Items are rated on a Likert scale ranging from 0 (*very little*) to 4 (*very much*). The ASI yields a total score by summing the ratings across all items, with higher scores reflecting higher levels of anxiety sensitivity.

Reiss (1991) posited that anxiety sensitivity constitutes a disposition to developing anxiety and does not require the experience of clinically significant anxiety in its own development. Telch, Lucas, and Nelson (1989) hypothesized that ASI is a four-factor scale, for which it would be more appropriate to regard the four factors as components of a single construct; the most parsimonious view of ASI is as a single-factor index (Taylor et al. 1992).

To test the validity of the ASI on a community sample, Schmidt and Joiner (2002) conducted an items analysis. Using corrected item-total correlations, they found that the 16-item scale had a coefficient of .86. However, they found that items 1, 5, and 7 produced questionable item-total correlations (e.g., correlations less than .20). After deleting these items, the internal consistency of the scale improved ($\alpha = .88$). In the current sample, a Cronbach alpha for the 16 items yielded acceptable internal consistency ($\alpha = .90$).

ATTITUDES TOWARD DELINQUENCY

Attitudes toward delinquency were assessed using the National Youth Survey's attitudes toward delinquency subscale. Questions included "How wrong is it for someone your age to steal something worth less than $5" or "How wrong is it to attack someone with the idea of seriously hurting or killing them?" Responses range from *very wrong* (4) to *not wrong at all* (1). The 14-item Attitude Toward Delinquency subscale demonstrated acceptable reliability with the current sample (α = .94). Items were scored so that a higher score represents a greater perceived wrongness (Elliot 1987).

POSTTRAUMATIC STRESS DISORDER

Symptoms often associated with posttraumatic stress disorder were measured using the Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez 1979). The IES assesses levels of subjective posttraumatic psychological distress and provides specific measures of event intrusion and event-related avoidance. The IES is a 15-item measure assessing the frequency with which experiences of intrusions, avoidance, and emotional numbing related to stressful events were experienced in the last week.

Respondents were asked to specify the frequency with which they had intrusion or avoidance-related thoughts on a Likert scale ranging from 0 (*not at all*) to 5 (*often*). Intrusion and avoidance were the two subscales, and a total score was calculated by summing across all items. Reliability scores were quite high, ranging from .78 to .92 in this study. Respondents were asked to use a specific violent event (of their choosing) as a reference point in answering the questions.

RESEARCH SETTINGS

Socioeconomic and Demographic Characteristics

During the time of data collection, the median annual household income across the nine housing developments ranged from $6,000 to $20,000, with a mean annual income of slightly less than $6,000. Incomes were adjusted to their 2008 values. The heads of households in the nine housing developments were disproportionately African American (95 percent) and female (97 percent). Latino families represented one-third (33 percent) of

the households in public housing in New York City. The number of children per household ranged from 2 to 2.5 children.

CITY 1: ST. LOUIS

City 1 included three housing developments: one mixed high-rise and low-rise development and two barrack-style developments. The 2005 median household income in the three housing developments was $6,864. More than 75 percent of the residents had incomes below the official poverty line. Approximately 90 percent of the households were female-headed. The three developments housed approximately 3,500 residents, with 47 percent of residents being under the age of 18. A total of 96 percent of the residents were African American (St. Louis Housing Authority 2006).

The first development in City 1 included three high-rise buildings totaling 242 units and 12 low-rise barrack-style buildings totaling 92 units. The developments occupied six city square blocks. The second development in City 1 included 53 low-rise barrack-style buildings hosting 657 units. The development occupied nine city square blocks. The third development in City 1 consisted of 16 two-story townhouse buildings totaling 148 units built on five city square blocks.

Recruitment efforts in City 1 yielded a sample of 238 African American adolescents age 13 to 19, with a mean age of 15.6 years and a standard deviation of 2 years. Males (52 percent) had a slightly higher, but not significantly higher, representation than females (48 percent). In all, 37 percent lived in the first housing development, 32 percent lived in the second housing development, and 31 percent lived in the third development. Data collection was completed in City 1 in the fall of 2005.

CITY 2: WASHINGTON, DC

City 2 included two low-rise barrack-style public housing neighborhoods. A total of 223 residents lived in the first neighborhood and 426 residents lived in the second neighborhood. Ninety-eight percent of the families were African American, and 58 percent of the residents were under the age of 18. In 2006, the median household income was approximately $10,200 (Office of Resident Services 2006).

The first public housing neighborhood in City 2 consisted of 58 low-rise barrack-style buildings with 234 units occupying four city square blocks. The second public housing neighborhood in City 2 consisted of

108 low-rise barrack-style buildings housing 432 apartments occupying five square city blocks.

Recruitment efforts in City 2 yielded a sample of 164 African American adolescents age 11 to 19, with a mean age of 15.7 with a standard deviation of 2.3 years. Males (60 percent) had a slightly higher representation than females (40 percent). Fifty-seven percent lived in the first housing development and 43 percent lived in the second housing development. Data collection was completed in City 2 in the fall of 2006.

CITY 3: NEW YORK CITY (QUEENS)

City 3 included the largest high-rise housing development in the United States. It is divided into northern and southern sections, which[em dash] at the behest of residents—were treated as independent developments. Together, these two developments included 96 six-story buildings and housed 3,142 apartments. It occupied approximately 10 city square blocks and was home to slightly less than 3,000 families. In 2006, the median household income was slightly more than $20,000. Minority families (60 percent African American and 33 percent Latino) represented more than 90 percent of the families in this housing development. Seventy-five percent of the population was under the age of 18 years, with 60 percent being between the ages of 10 and 18 (Department of Resident Services 2007).

Recruitment efforts in City 3 yielded a sample of 237 African American adolescents age 11 to 19, with a mean age of 14.9 and a standard deviation of 2.4 years. Males (48 percent) had a slightly lower representation than females (52 percent). All participants lived in one housing development. Data collection was completed in City 3 in the fall of 2007.

CITY 4: PHILADELPHIA

City 4 included two housing developments: one two-story barrack-style housing development and one development with two 17-story high-rises buildings. The first development in City 4 consisted of 43 buildings containing 535 units; the two 17-story high-rise buildings in the second development hosted 499 units. The two developments had approximately 2,230 residents, with 63 percent under the age of 21. Ninety-eight percent of the residents were African American. The 2007 median household income in the two housing developments was approximately $7,500.

Recruitment efforts in City 4 yielded a sample of 149 African American adolescents age 12 to 20 years, with a mean age of 15.6 and a standard

deviation of 2.4 years. Fifty percent of the sample was female. Youth resided in two housing developments. Data collection was completed in City 4 in the fall of 2007.

Sample Characteristics

Our recruitment efforts yielded a total sample of 898 youth living in public housing neighborhoods across four major U.S. cities: 26.5 percent from St. Louis, 18.3 percent from Washington DC, 38.6 percent from New York City (Queens), and 16.6 percent from Philadelphia. The sample reported an average age of 15.4 years, with a standard deviation of 2.3 years. Females represented 52.3 percent of the sample. Eighty-seven percent of the sample reported being African American, whereas the next largest group (9.5 percent) reported being of mixed race. The sample reported 4.7 family members in their household at the time of data collection.

Eighty percent of participants reported that their maternal caregiver was their biological mother, and 58 percent reported that their paternal caregiver was their biological father. Forty-three percent reported having both parents in their household, 80 percent reported having their mother in their household, and 56.4 percent reported having their father in their household. The sample reported that their nuclear family has lived in their public housing neighborhoods for an average of 13 years, with a standard deviation of 12 years. See tables 4.1 to 4.4 for descriptive statistics on the sample and comparisons among cities and between genders.

Limitations of the Data

These data will advance knowledge on a difficult-to-reach and scarcely studied population, but the limitations should be acknowledged. First, the subsample for each city may not include all measures, which inevitably determines what variables are included in the empirical chapters. The St. Louis subsample does not include measures of community and domestic violence, health-risk behaviors (sex and drug use), and parental behavior by the gender of the parent. Only the subsample for Philadelphia includes measures on emotional and practical support and help-seeking behavior.

Second, the empirical chapters are based on cross-sectional data. The chapters, therefore, only portray a snapshot of the lives of adolescents living

in urban public housing. Causality and effects over time cannot be assessed on the basis of these data.

Third, the empirical chapters are based on a nonprobability sample. That is, sampling techniques included purposive and convenient sampling. We also used snowball sampling to gain access to youth who are not connected to mainstream institutions (e.g., schools, community centers, social service agencies). It should also be noted that, due to the difficulties associated with recruiting urban African American adolescents living in public housing in research, rigorous probability methods might not have yielded adequate sample size. Also, in light of the fact that this population has a near absence in empirical research, this nontraditional recruitment strategy was employed.

Finally, the results are based on a sample of youth living in public housing in large urban cities. Therefore, generalizing these findings to youth living in nonurban public housing and urban youth not living in public housing should be done with caution.

5

Modeling Latent Profiles of Efficacious Beliefs and Attitudes Toward Deviance

▸ *VON E. NEBBITT AND AJITA M. ROBINSON*

INTRODUCTION

SINCE ITS INCEPTION, THE CENTRAL theme of research on low-income urban African American youth has been deficits and pathologies, with a relative exclusion of capacities and strengths. In 1999, Zimmerman, Ramirez-Valles, and Maton noted that much more is known about the causes of psychopathology among African American youth than about how and why some of these youth become well-functioning citizens. A review of empirical papers suggests that research, with few exceptions, has not deviated from this trend. One exception has been the proliferation of studies on self-efficacy and its effects on reducing risk behavior (Goh, Primavera, & Bartalini 1996; Jonson-Reid et al. 2005) and increasing well-being (Connell, Spencer, & Aber 1994) in African American youth. Studies have also emerged that attempt to identify familial and community correlates of self-efficacy in African American adolescents (Lombe, Nebbitt, & Mapson 2009; Nebbitt 2009).

This emerging body of research on African American youth has the potential to move the discussion beyond a focus on deficits to include a focus on positive aspects in these youth. Still, an obvious gap in this literature is research that attempts to identify characteristics in samples of urban African American youth that have the potential to increase their life chances. It is very likely that prosocial attitudes and beliefs co-occur in youth, as mental health symptomology (e.g., depression, anxiety) also co-occurs in youth.

Using latent profile analysis, this chapter explores whether there are subgroups of youth based upon their attitudes toward deviance and their

efficacious beliefs. This chapter also assesses how membership in these subgroups is influenced by environmental factors (community and family), which in turn influences youths' symptoms and behavior.

SELF-EFFICACY AND ATTITUDES TOWARD DEVIANCE

Self-efficacy is defined as a person's belief about their ability to organize and execute courses of action necessary to achieve a specific goal (Bandura 1977). Individuals with strong efficacious beliefs are more confident in their capacity to accomplish their desired goals. Efficacious beliefs have a significant impact on youths' goals and accomplishments by influencing their personal choices, motivation, patterns, and emotional reactions. Generalized perceived self-efficacy also determines the level of effort and persistence a person demonstrates in the face of adversity. Self-efficacy is positively related to persistence—a trait that allows us to gain corrective experiences that reinforce our sense of self-efficacy.

In addition to efficacious beliefs, adolescents' attitudes toward deviant behaviors are critical to their involvement in antisocial and health-risk behaviors. *Attitude toward deviant behavior* refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen 1991). The likelihood of an adolescent performing behaviors of different kinds can be predicted with high accuracy from attitudes toward the behavior. However, the failure of attitudes to predict specific behaviors directed at the target of the attitude has produced calls for abandoning the attitude concept (Wicker 1969). However, research by Kenneth Miller (1975) suggested that a situational multiattribute attitude model may allow more accurate assessment of behavior prediction on the basis of attitudes.

Because of the aggregated nature of adolescents' attitudes, their views toward deviance and their efficacious beliefs may predict specific behaviors, which in turn are predicted by contextual factors.

CORRELATES OF SELF-EFFICACY AND ATTITUDES TOWARD DELINQUENCY

Efficacious Beliefs

Evidence suggests that self-efficacy is inversely related to delinquent behavior in youth. Specifically, youth who reported higher self-efficacy exhibited lower delinquent behavior (Chung & Elia 1996; Donnellan et al. 2004).

Research has also found individual characteristics related to self-efficacy in youths (Jenkins, Goodness, & Buhrmester 2002). For example, a youth's mental health status has been indicated as a strong correlate of self-efficacy (Francis et al. 2007; Maciejewski, Prigerson, & Mazure 2000). These studies indicate that higher self-efficacy is associated with lower scores of depression. Likewise, self-efficacy is said to be inversely related to stressful life events, exposure to violence, attachment anxiety, and feelings of loneliness (Wei, Russell, & Zakalik 2005).

The relationship between peer affiliation and an adolescent's behavior is well documented (Boyer, Tschann, & Shafer 1999; Henrich et al. 2000). Although it is clear that peers play an important role in adolescents' involvement in delinquent behavior, little is known about the role peers play in influencing an adolescent's self-efficacy. Evidence does suggest, however, that self-efficacy waxes and wanes over time, by social comparison with peers, especially peers with similar capabilities (Center for Positive Practices 2000). Indeed, group norms, aspiration, and performance have been found to influence collective and individual efficacy (Prussia & Kinicki 1996). Moreover, evidence suggests that youth tend to affiliate with peers who share the same interests and values, thus ensuring the promotion of self-efficacy in directions of mutual interest (Bandura 1994; Center for Positive Practices 2000).

Attitudes Toward Deviance

Previous research among adolescents has found favorable attitudes toward deviance associated with problem behavior (Heimer & Matsueda 1994; Huesmann & Guerra 1997; Zhang, Loeber, & Stouthamer-Loeber 1997). Existing evidence suggests that adolescents with predispositions to delinquency are more likely to engage in delinquent behavior (Moffitt & Caspi 2001). The general assumption is that an increase in tolerance toward delinquency often precedes the initiation of delinquent acts (Pardini, Loeber, & Stouthamer-Loeber 2005). Evidence also indicates that the influence of attitudes on behavior may be contingent upon a number of covariates, including the environment and the mental health status of the youth (Nebbitt, Lombe, & Williams 2008). Indeed, the environment in poor neighborhoods is often charged with factors that may heighten mental health symptoms, such as depression (Nebbitt & Lombe 2007). For example, feelings of depression may be deepened in situations that are perceived as threatening, such as witnessing community violence, the death of a friend

or family member, verbal insults, or physical assault. Such incidences, in certain individuals, may increase pressure to cope; engagement in a health-risk behavior, such as delinquency, may be a possible response.

Co-Occurring Efficacious Beliefs and Attitudes Toward Deviance

Research has found individual characteristics associated with self-efficacy in youths (Francis et al. 2007; Jenkins, Goodness, & Buhrmeister 2002; Maciejewski, Prigerson, & Mazure 2000). Evidence suggests that an adolescent's attitude toward deviance is a gauge of their efficacious beliefs (Huesmann & Guerra 1997; Zhang, Loeber, & Stouthamer-Loeber 1997). Youth who report higher levels of self-efficacy exhibited lower levels of delinquent behavior (a good proxy of an adolescent's norm-violating attitude; Conner et al. 2004; Galilner, Evans, & Weiser 2007). Considering the co-occurrence of self-efficacy and attitudes toward deviance, it is likely that there are typologies of youth based upon their attitudes toward norm-violating acts and their efficacious beliefs. The evidence reviewed previously provides a sound empirical foundation for an investigation into variations in urban youth based upon their attitudes and beliefs.

THEORETICAL ORIENTATION

Social context plays a critical role in an adolescent's development. African American youth living in public housing face several challenges due to a high concentration of poverty and social problems that exist in many public housing neighborhoods. It is important to note, however, that despite living in public housing, many African American youth manage to do well (Furstenberg et al. 1999). Most remain in school, graduate, and avoid significant life-compromising behavior (Smith et al. 1995). Coll et al. (1996) argued that low-income urban communities are simultaneously promoting and inhibiting, which contributes to the multifinality exhibited by youth in public housing. Indeed, African American adolescents in urban public housing are influenced by positive and negative aspects of their community. Surely, they need an array of internal resources in addition to social support to navigate their living environments and to survive (Dodge & Frame 1982).

The Integrated Model of Adolescent Development in Public Housing Neighborhoods (detailed in chapter 3) provides a framework for explicating

and investigating how positive outcomes in youth are achieved within the context of public housing neighborhoods. A section of the Integrated Model posits that adolescents' internalized resources (e.g., self-efficacy, attitudes toward deviance) are directly influenced by the positive and negative aspects of the public housing neighborhood. The model argues that the impact of negative aspects of the neighborhood depends on the level of protective factors available to the youth. The model further posits that an adolescent's internalized resources (e.g., efficacious beliefs, attitudes toward deviance), in turn, are related to symptoms and behaviors. This chapter tests these hypothesized relationships of the Integrated Model on Adolescent Development in Public Housing Neighborhoods.

This chapter has three goals. First, it explores whether there are latent classes of youth based on their attitudes toward deviance and their efficacious beliefs (e.g., self-efficacy). Second, it examines how class membership is associated with adolescents' symptoms, behaviors, and affiliates. Third, it assesses whether contextual risk and protective factors and their interactions predict youths' membership in each latent class. This chapter advances three research questions:

1. What are the underlying variations in efficacious beliefs and attitudes toward deviance among African American adolescents living in urban public housing?
2. How are variations in efficacious beliefs and attitudes toward deviance related to African American adolescents' symptoms and behavior?
3. How are variations in efficacious beliefs and attitudes toward deviance associated with perceptions of peers, family, and community?

METHODS

The sample for this chapter includes youth from Washington DC, Philadelphia, and New York City. St. Louis was excluded from this analysis, as there were no data on self-efficacy from the St. Louis sample.

Indicators of Efficacious Beliefs and Attitudes Toward Deviance

As table 5.1 summarizes, 24 items were used to identify latent classes across the pool of study participants based on their self-efficacy and attitudes

TABLE 5.1 Summary of Attitudes and Efficacy Indicators ($n = 660$)

ATTITUDES TOWARD DEVIANCE[a] (RANGE, 1–4)	MEAN	SD
1. Use marijuana?	1.75	1.01
2. Damage or destroy property that does not belong to you?	2.04	1.14
3. Steal something worth less than $5?	2.15	1.24
4. Hit or threaten to hit someone for no reason?	2.70	1.29
5. Use alcohol?	1.39	0.80
6. Break into a vehicle or building to steal something?	1.75	1.06
7. Sell drugs such as heroin, cocaine, and crack?	1.62	0.99
8. Steal something worth $5?	1.71	1.00
9. Get drunk once in a while?	1.59	0.99
10. Give or sell alcohol to kids under 18?	1.57	0.96
11. Attack someone with the idea of seriously hurting or killing them?	1.48	0.92
12. Exceed the speed limit by 10 or 20 mph?	1.55	0.89
13. Use force to get money or things from people?	1.91	1.19
14. Hit and injure their girlfriend or boyfriend?	2.34	1.27
GENERALIZED SELF-EFFICACY (RANGE, 1–4)		
1. I can always manage to solve difficult problems if I try hard enough.	2.40	1.15
2. If someone goes against me, I can find a way to get what I want.	2.23	1.05
3. I am sure that I can accomplish my goals.	2.78	1.22
4. I am confident that I could handle unexpected events.	2.46	1.13
5. Thanks to my abilities, I can handle unexpected situations.	2.45	1.13
6. I can solve most problems if I put in the necessary effort.	2.57	1.16
7. I remain calm when facing problems because I can rely on my coping abilities.	2.22	1.08
8. When I am faced with a problem, I can find several solutions.	2.34	1.05
9. If I am in trouble, I can think of a good solution.	2.39	1.11
10. I can handle whatever comes my way.	2.29	1.12

[a]Items began with, "How wrong is it for someone your age to . . ."

toward deviance. To assess efficacious beliefs, youth completed the General Perceived Self-Efficacy Scale (Schwarzer & Jerusalem 1995). To assess attitudes toward deviance, youth completed the National Youth Survey's Attitudes Toward Delinquency Subscale (Elliot 1987).

Covariates

The covariates were as follows:

1. Exposure to Delinquent Peers and Self-Reported Delinquency (Elliot 1987)
2. Anxiety Sensitivity Index (Peterson & Reiss 1987)
3. Center for Epidemiological Study Depression Scale (Radloff 1977)
4. Alcohol, tobacco and marijuana use, assessed using the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (2011)
5. Maternal and Paternal Encouragement Parental Attitude Measure (Lamborn et al. 1991)
6. Domestic violence, assessed using the Family Conflict Scale (Barbarin, Richter, & deWet 2001)
7. Neighborhood hazard and cohesion, assessed using the Subjective Neighborhood Scale (Aneshensel and Sucoff 1996)
8. Survey of Exposure to Community Violence: Self-Report Version (Richters & Martinez 1990)

Analytic Procedures

As previously mentioned, we employed latent profile analysis (LPA) to determine the optimal number of subgroups or classes. Because our indicator variables were ordinal, LPA is the appropriate technique. If they were dichotomous, then we would have employed latent class analysis. Although housing units were large and few in number, robust standard errors were employed to correct for biasing due to any data nesting. Once the optimal number of subgroups was identified, we examined class differences based on the aforementioned covariates. Chi-square and analysis of variance (ANOVA) employing Bonferroni post-hoc tests were used for this examination. Finally, a multinomial logistic regression model was executed, with subgroup membership serving as the dependent variable to further refine and interpret the effects of covariates on the identified subgroups.

With respect to the execution of our LPA models, our analysis was carried out in an exploratory fashion using LatentGOLD version 4.5 software (Vermunt & Magidson 2005). Rather than testing a class solution specified a priori, analyses examined the fit of a series of different models.

Missing values were assumed to be missing at random and were imputed using an expectation maximization algorithm. A single-class model was examined first, and classes were added one at a time until four classes were completed. The empirical fit of each model was determined on the basis of several fit indices, including the Bayesian Information Criterion (BIC) and the Akaike Information Criterion (AIC). As model fit improves, the values of the BIC and AIC decrease. The conceptual fit of models is critical. Here, it was examined by using visual representations of the indicators and assessing their theoretical interpretability and practical implications.

RESULTS

Descriptive Summary

As table 5.2 shows, the mean age of the study sample was 15.4 years (SD = 2.42). The sample was 47.7 percent female (n = 313) and was composed predominately of African Americans (82.8 percent) and biracial youth (12.9 percent). The sites from which the study sample was drawn were New York City–Queens (n = 237, 35.9 percent; and n = 110, 16.7 percent), Philadelphia (n = 149, 22.6 percent), and Washington, DC (n = 164, 24.8 percent).

Latent Profile Analysis

All 24 indicator variables were significant contributors to distinguishing classes. The empirical fit indices reported in table 5.3 show that BIC and AIC values decrease as additional classes are added. A four-class solution exhibited the best fit with respect to BIC and AIC values, entropy, and low class error. To test whether the three-class solution was a better fit to the data, a conditional bootstrap simulation with 1,000 iterations was executed to compare the four-class solution with the three-class solution. Results (table 5.3) showed that the four-class solution was a superior fit for the data (−2LL differential = 1158.82, $p < .0001$).

The conceptual fit of the models was determined through visual inspection and meaningfulness. This involved plotting the estimated mean values for each indicator variable by each class. Results (figure 5.1) show that classes are clearly distinguishable and are composed of a moderate

TABLE 5.2 Sociodemographic Characteristics Across Research Sites (n = 660)

CHARACTERISTIC	DATA
Age, mean (SD)	15.4 (2.42)
Gender: female	313 (47.7)
Race/ethnicity	
African American	545 (82.8)
Biracial	85 (12.9)
Other[a]	28 (4.2)
City	
New York City (North Site)	237 (35.9)
New York City (South Site)	110 (16.7)
Philadelphia	149 (22.6)
Washington, DC	164 (24.8)

Data are n (%) unless otherwise noted.

[a]Includes white, Latino/Hispanic, Native American, and Asian.

TABLE 5.3 Fit Indices for Latent Classes (1–4) (n = 660)

CLASS SOLUTION	BIC	AIC	L^2	ENTROPY	CLASS ERROR
One class	37,874.19	37,550.76	29,823.36	NA	NA
Two classes	34,328.97	33,893.23	26,115.83	0.94	0.02
Three classes	32,639.81	32,091.76	24,264.36	0.94	0.02
Four classes[a]	31,643.29	30,982.93	23,105.53	0.93	0.03
Conditional bootstrap simulation				−2LL differential	p value
Four classes versus three classes				1,158.82	<0.0001

BIC, Bayesian Information Criterion; AIC, Akaike Information Criterion; L^2, log squared; NA, not applicable.

[a]Model solution chosen.

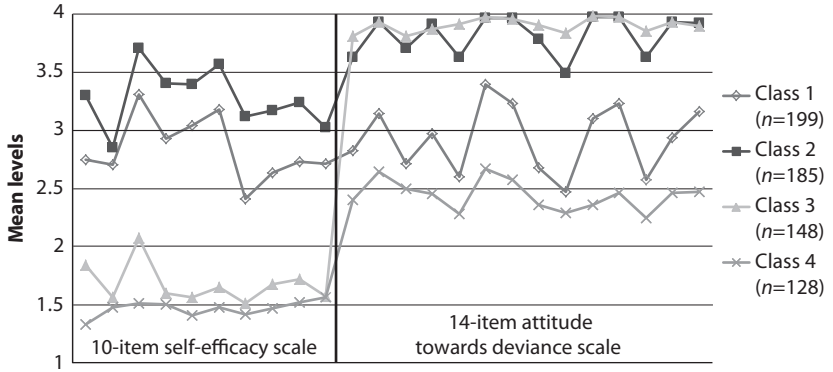

FIGURE 5.1 Mean plots for scores on indicators of efficacy and attitudes across classes.

attitudes and moderate efficacy subgroup (class 1, $n = 199$), a high attitudes and high efficacy subgroup (class 2, $n = 185$), a high attitudes and low efficacy subgroup (class 3, $n = 148$), and a low attitude and low efficacy subgroup (class 4, $n = 128$). In sum, the four-class model was conceptually clear and theoretically important.

Comparisons of Subgroups

As shown in table 5.4, chi-square tests revealed several proportional differences in class composition. Classes differ to a statistically significant degree in gender (χ^2 [3] = 18.84, $p < .000$), having tried alcohol (χ^2 [6] = 22.13, $p < .001$), and having tried marijuana (χ^2 [6] = 15.00, $p < .05$). There were no compositional differences across classes with regard to currently being in school or having tried tobacco. With respect to gender, results show that adolescents in class 2 (high efficacy and high unfavorable attitudes) were predominately female (59 percent), and class 4 (low efficacy and low favorable attitude) were predominately male (66 percent). With regard to marijuana use, adolescents in class 2 (high efficacy and high unfavorable attitudes) reported the highest percentage of youth who had not tried marijuana (54 percent) and class 4 (low efficacy and low favorable attitude) reported the highest percentage of youth who had tried marijuana (59 percent).

One-way ANOVA detected numerous mean differences across latent classes (table 5.4). Delinquent behavior ($F = 35.14$, $p < .001$), exposure

TABLE 5.4 Tests of Differences Among the Four-Class Solution Using Chi-Square and One-Way ANOVA ($n = 660$)

COVARIATES	CLASS 1 ($n = 199$)	CLASS 2 ($n = 185$)	CLASS 3 ($n = 148$)	CLASS 4 ($n = 128$)	χ^2	F	P VALUE
Gender (%)							
Female	29.7	34.5	22	13.7			
Male	30.9	21.9	23	24.2	18.84		< .000
Site (%)							
New York 1	34.2	27.8	21.5	16.5			
New York 2	39.1	28.2	17.3	15.5			
Philadelphia	24.8	26.8	28.2	20.1	22.43		0.008
Washington, DC	23.2	29.3	22	25.6			
Not in school[a]	14.1	11.4	12.3	14.1	NS		
Alcohol use[a]	28	46.8	41.2	40	22.13		0.001
Tobacco use[a]	45.2	53.8	49.2	48.5	NS		
Marijuana use[a]	41.8	54.5	48.4	40.9	15.00		0.02
Adultification, mean (SD)[b,f]	6.32 (2.18)	7.11 (2.34)	7.21 (2.37)	6.21 (2.30)		7.96	< .000
Delinquency, mean (SD)[b,d,f]	24.77 (9.36)	18.03 (4.66)	19.20 (7.35)	25.67 (10.88)		35.14	< .000
Anxiety sensitivity, mean (SD)	24.23 (4.99)	24.09 (5.50)	23.60 (5.85)	23.17 (5.20)		NS	
Deviant peers, mean (SD)[b,d,f]	28.68 (9.36)	22.46 (7.34)	22.87 (9.10)	29.25 (11.41)		25.37	< .000
Depressed symptoms, mean (SD)[b,d,f]	18.56 (9.57)	14.92 (8.80)	15.37 (8.60)	19.21 (9.58)		9.13	< .000

Class 1 was moderate attitudes and moderate efficacy, class 2 was high attitudes and high efficacy, class 3 was high attitudes and low efficacy, and class 4 was low attitudes and low efficacy. Post-hoc comparisons (Bonferroni) were conducted for all ANOVAs.

ANOVA, analysis of variance; NS, not significant.

[a]Percentage not in school and have not used.

[b]Classes 1 and 2 are different.

[c]Classes 2 and 3 are different.

[d]Classes 1 and 3 are different.

[e]Classes 1 and 4 are different.

[f]Classes 2 and 4 are different.

to deviant peers ($F = 25.37$, $p < .001$), depressive symptoms ($F = 9.13$, $p < .000$), and adultification ($F = 7.96$, $p < .000$) differ significantly across latent classes. Anxiety sensitivity did not differ across latent classes. Bonferroni post-hoc comparisons revealed significant differences between classes. That is, class 2 (high efficacy and high unfavorable attitudes) reported significantly lower mean scores on delinquency ($M = 18.03$, SD = 4.66) compared with classes 1 and 4. Delinquency did not differ between class 2 and 3. However, class 2 adolescents also reported significantly lower exposure to deviant peers ($M = 22.46$, SD = 7.34) compared with classes 1 and 4; exposure to delinquent peers did not differ between class 2 and 3. Adolescents in class 2 ($M = 14.92$, SD = 8.80) reported significantly lower depressive symptoms compared with classes 1 and 4, but not class 3. With respect to adultification, class 2 ($M = 7.11$, SD = 2.34) and class 3 ($M = 7.21$, SD = 2.37) reported significantly higher levels of adultification than classes 1 and 4. Class 2 did not differ from 3, and class 1 did not differ from class 4.

Covariate Effects on Class Membership

To further explore and refine the adolescent development model, we used theoretically proposed community- and family-level risk (e.g., exposure to community violence, neighborhood hazard, domestic conflict) and protective (e.g., social cohesion, extended and fictive family, maternal and paternal encouragement) factors across classes in a multinomial logistic regression analysis to assess their ability to predict class membership. This regression, using a simultaneous entry, facilitated direct and indirect tests of variables in predicting class membership. Class 2 (high efficacy and high unfavorable attitudes) serves as the reference group.

The results of the multinomial logistic regression are displayed in table 5.5. Results indicate several statistically significant predictors of class membership (χ^2 [18] = 144.47, −2LL = 1.55, $p < .000$). The model correctly classified 42 percent of the classes, with class 2 (67 percent) representing the class with the highest percent of cases correctly classified. Members in class 1 were significantly less likely to have fictive kinship present in the housing neighborhood compared with members of class 2. Compared with class 2, classes 1, 3, and 4 were significantly less likely to report maternal encouragement, and class 3 was significantly more likely to report receiving paternal encouragement compared with class 2. Domestic conflict increased the

TABLE 5.5 Multinomial Logistic Regression: Criterion—Class Membership

REFERENCE: CLASS 2 (HIGH/HIGH)	CLASS 1 (MODERATE/ MODERATE)	CLASS 3 (HIGH/LOW)	CLASS 4 (LOW/LOW)
COVARIATE	OR (CI)	OR (CI)	OR (CI)
Fictive kinships[a]	0.607 (0.380–0.970)*	1.05 (0.658–1.681)	1.26 (0.760–2.11)
Maternal encouragement	0.906 (0.864–0.951)***	0.884 (0.840–0.931)***	0.839 (0.796–0.885)***
Paternal encouragement	0.986 (0.951–1.03)	1.04 (1.00–1.08)*	0.991 (0.952–1.03)
Domestic violence	1.062 (1.01–1.11)*	1.016 (0.962–1.07)	1.086 (1.03–1.14)**
Victimization by violence	1.060 (1.00–1.11)*	1.089 (1.02–1.15)**	1.112 (1.04–1.18)**
Witnessing violence	0.994 (0.951–1.03)	0.924 (0.878–0.973)**	0.931 (0.882–0.983)**

OR, odds ratios; CI, 95% confidence intervals; *$p < .05$, **$p < .01$, ***$p < .001$.
[a]Reference: no fictive kinships in the neighborhood.

likelihood of membership in class 3 compared with class 2. Classes 1, 3, and 4 were significantly more likely to have been victimized by community violence compared with class 2. On the other hand, classes 3 and 4 were significantly less likely to have witnessed community violence.

DISCUSSION

Historically, research has focused on the pathologies and deficits exhibited by African American youth while ignoring the signs of resiliency evident in this population. A section of the adolescent development model posits that promotive aspects of public housing neighborhoods contribute to increased self-efficacy and less favorable attitudes toward deviance; efficacious beliefs and conventional attitudes, in turn, are associated with positive emotionality and prosocial behavior. To test this section of the adolescent development model, this chapter explored variations in latent classes of adolescents based on their self-efficacy and attitudes toward deviance; assessed how adolescents differ on their depressive symptoms, anxiety sensitivity, delinquent behavior, and exposure to deviant peers based on their class membership; and examined how inhibiting and promotive aspects of public housing neighborhoods predict membership in each latent class.

Findings support the model in part. For example, adolescents' underlying profile of attitudes and efficacy differentiated their behavior, mental health symptoms, and peer affiliations. Youth with conventional attitudes and more efficacious beliefs used less alcohol and marijuana than other youth. Youth with conventional attitudes and more efficacious beliefs were engaged in less delinquent behavior themselves and were affiliated with less youth involved in antisocial behavior, compared with youth with more favorable attitudes toward deviance and low efficacious beliefs. Furthermore, adolescents with less favorable attitudes toward deviance and high or low self-efficacy also experienced far fewer symptoms of depression than youth with more favorable attitudes toward deviance and moderate to low efficacious beliefs.

Higher self-efficacy appears to be a moderating effect against depressive symptoms, which is consistent with the research regarding protective factors being a mitigating factor against health risks (Zimmerman, Ramirez-Valles, & Maton 1999; DiClemente et al. 1996). Furthermore, this study suggests, although does not empirically support, that the level of exposure to deviant peers is not as significant for adolescents who are highly efficacious with high attitudes toward deviance, in comparison to moderate and low efficacious peers. The co-existence of high efficacy and high attitudes toward deviance supports the existence of prosocial attitudes and beliefs co-occurring in youth. Perhaps the most intriguing implication of this study with regard to understanding the relationship of self-efficacy and attitudes toward deviance is the identification of several classes of efficacy and attitudes toward deviance among the African American adolescents in this sample, which appear to affect the level to which youth engage in risky behaviors, the impact of peer associations, and the exhibition of depressive symptomology.

6

The Social Ecology of Adolescent Alcohol and Drug Use

▸ *MICHAEL G. VAUGHN, MARGARET LOMBE, STEPHEN TRIPODI, AND VON E. NEBBITT*

OVERVIEW OF THE ISSUE

ADOLESCENCE IS A STAGE OF development when young people strive for group identity and subsequently explore the larger social world (Erikson 1950; Giordano 2003). Accordingly, exposure to a variety of risks, such as violence and substance use, tends to increase during adolescence compared to childhood. For example, from 1993 through 2003, juveniles ages 12 to 17 years were approximately 2.5 times more likely than adults (i.e., ages 18 and older) to be victims of nonfatal violence (Lawrence & Hemmens 2008; Snyder & Sickmund 2006). Rates of exposure to community violence are far higher for African American adolescents than other racial and ethnic groups (Myers & Thompson 2000; Vaughn et al. 2008). This is exacerbated by the fact that African Americans reside in areas experiencing profound concentrated disadvantage, as exemplified by their overrepresentation in urban public housing developments marked by violence (community and domestic), gangs, substance abuse, and alternative market activity (e.g., drug trafficking).

Although a growing body of research has highlighted the associations among mental health symptoms and health-risk behaviors in African American adolescents living in urban public housing neighborhoods (see, e.g., DuRant et al. 2000; Nebbitt & Lombe 2007), research that has examined various ecological correlates of adolescents' alcohol and other drug use is notably absent. Important questions regarding the extent to which these relationships are mitigated by community cohesion remain largely unanswered. Using a sample of 663 African American adolescents living in

urban public housing, our study addresses this gap in knowledge by assessing how community cohesion buffers the relationship between multiple risk factors and adolescents' alcohol, tobacco, and marijuana use.

Exposure to Violence and Substance Use

Much is known about the prevalence of adolescent exposure to violence (Cooley-Quille et al. 2001; Gorman-Smith, Henry, & Tolan 2004; Myers & Thompson 2000). Research has emerged that links exposure to community violence, either as witness or victim, to a variety of emotional and behavioral problems (Gorman-Smith, Henry, & Tolan 2004; Myers & Thompson 2000; Oravecz et al. 2011; Schwartz & Gorman 2003). Documented emotional and behavioral consequences of violence exposure among both urban and rural youth include increased risk for symptoms of depression, anxiety, and posttraumatic stress disorder (PTSD; see, e.g., DuRant et al. 2000; Fitzpatrick & Boldizar 1993). These emotional and behavioral problems are intertwined with substance use.

Scholars also link exposure to community violence to drug initiation, use, and dependence (Cooley-Quille et al. 2001; DuRant et al. 2000). More specifically, DuRant et al. (2000), using a sample of African American youth living in public housing, found that exposure to violence was related to the frequency of use of cigarettes, alcohol, and other substances. Likewise, Clark, Lesnick, and Hegedus (1997) found an association between alcohol dependence in adolescence and childhood histories of violence exposure. One mechanism that explains these linkages is the proposition that alcohol and other drug use may be a form of coping behavior used to medicate or assuage difficult feelings related to traumatic memories (Kilpatrick et al. 2003).

Family and household conflict (e.g., domestic violence), which are often embedded within communities, are positively associated with adolescent problem behaviors, including psychological distress (e.g., Jacobson & Crockett 2000; Saltzman, Holden, & Holahan 2005). Studies have also indicated that exposure to violence in the home is a predictor of depression and PTSD among youth (Folsom et al. 2003; Voisin & Hong 2012) and is also associated with lower self-esteem and increased cognitive dysfunction (Saltzman, Holden, & Holahan 2005). Finally, living in a violent home and experiencing harsh parental discipline can also put youth at risk for both

current and future substance abuse (Hawkins, Catalano, & Miller 1992; Kilpatrick et al. 2003; Sloboda & David 1997).

DEVIANT PEERS AND SUBSTANCE USE

The developmental period of adolescence involves individualization from family and identification with a peer group (Brown & Klute 2006). As a result of this change, peers exert relatively greater influence and form an important behavioral reference for an adolescent. Findings indicate similarities in levels of risk behavior among adolescents within the same peer group (Henrich et al. 2000). In fact, affiliation with delinquent peers is one of the most consistent and strongest predictors of delinquent behavior (Keenan et al. 1995; Nebbitt, Lombe, & Williams 2008; Warr 2003).

Moreover, research has reported a link between affiliating with delinquent peers and a variety of emotional problems in adolescents (Brendgen, Vitaro, & Bukowski 2000; Fergusson & Woodward 2002). For example, youth who affiliated with delinquent peers reported more depressive feelings and suicidal behaviors compared to those who affiliated with nondelinquent peers (Brendgen, Vitaro, & Bykowksi 2000; Nebbitt & Lambert 2009; Nebbitt & Lombe 2007). One way to view these relationships is that psychological distress (e.g., depressive symptoms, anxiety) among youth residing in harsh urban communities serves as a mediator between exposure to environmental stressors and substance use (Sanders-Phillips 2001). This relationship, however, has not been fully explored among African American adolescents living in urban public housing communities; hence, there is a need for further empirical examination within this vulnerable population.

Still, research has established a direct relationship between exposure to delinquent peers and substance use in adolescents (Kilpatrick et al. 2000; Vaughn, Beaver, & DeLisi 2009). A peer environment perceived to be accepting of substance use may be inviting to an adolescent who is struggling to cope with the stresses associated with the urban environment.

DELINQUENT BEHAVIOR AND SUBSTANCE USE

Convergent findings across studies of delinquent youth indicate significant overlap between problem behaviors and substance misuse (Thompson et al. 1996; Tripodi, Springer, & Corcoran 2007). Research by

Vaughn et al. (2007) has shown that substance use severity and serious delinquency go hand in hand, clustering together along a severity-based gradient. Essentially, youth who use the most drugs have the most extensive criminal histories. Furthermore, early initiation of substance use is an important predictor of later delinquency (Lipsey & Derzon 1998). However, does substance use possess an independent effect, irrespective of delinquent offending? A 30-year prospective study by Odgers et al. (2008) showed that early initiation of substance use was a risk factor for maladaptive problems, irrespective of delinquent behavior and conduct disorder. Studies are needed to elucidate the effects of social-ecological contextual variables on the intertwined nature of delinquency and substance use.

CO-OCCURRENCE OF PTSD AND SUBSTANCE USE

Studies have shown a strong association between PTSD and substance abuse problems. Specifically, in a study assessing risk factors for PTSD, Deykin and Buka (1997) identified substance use disorders as potential risk factors. As previously mentioned, the mechanism hypothesized is that the use of alcohol and other drugs may be a coping behavior to assuage painful feelings and memories (DuRant et al. 2000). Indeed, it has been postulated that exposure to stress heightens the predisposition for drug initiation and use (Piazza & Moal 1996; Volkow & Fowler 2000). The underlying biologically based tendency to abuse and become dependent on substances is partly expressed by exposure to environmental stress (Sinha 2009). This form of explanation is consistent with viewing these dynamic relations as a gene–environment interaction (e.g., Rutter 2007).

COMMUNITY COHESION AS A MODERATING FACTOR

Youth residing in harsh environments often rely on various social factors to help them overcome the harmful effects stemming from their adverse life circumstances. One such factor is community cohesion, perceived as supportive relationships beyond a youth's immediate home environment (Gutman, Sameroff, & Eccles 2002). Social support generally consists of a network of peers and caring adults within a youth's community and is evaluated on the basis of people's perceptions of how community members relate to each other (Garbarino & Kostelny 1992; Rountree & Warner 1999).

Some evidence suggests that supportive relationships outside a youth's immediate family buffer environmental challenges by providing youth with an avenue to process their experiences with peers or caring adults within their communities (Garbarino & Kostelny 1992). Furthermore, adolescents are more likely to avoid risky behaviors when they perceive themselves to be socially integrated and exposed to a variety of prosocial community assets, including social support (Benson et al. 2006; Hawkins et al. 2007).

Empirical evidence on exposure to community violence vis-à-vis a youth's emotional and behavioral well-being is mixed. Some scholars have found positive adaptations after exposure to community violence among youth who perceived high rates of social cohesion (Aneshensel & Sucoff 1996; Zimmerman et al. 2000), whereas others reported that social cohesion is only associated with fewer internalizing symptoms (Kliewer et al. 2004). Nebbitt (2009) found higher community cohesion to be associated with higher generalized self-efficacy, which was associated with lower alcohol and other drug use in adolescents.

Greater research attention has been afforded to understanding the effects of community cohesion on psychological (internalizing) functioning in urban youth (Aneshensel & Sucoff 1996; Zimmerman et al. 2000) compared to empirical evidence assessing the relationships between community cohesion and a youth's externalizing behavior (e.g., substance abuse). Rigorous examination of this relationship may have important implications for promoting resilience and health predispositions among African American youth in urban public housing communities. The goal of this chapter is to address this gap in knowledge by examining the direct effect of individual and community correlates on substance use and assessing how these relationships may be moderated by community cohesion.

THEORETICAL ORIENTATION

This chapter tests the component of the Integrated Model of Adolescent Development in Public Housing Neighborhoods, which postulates that negative aspects of public housing environments (e.g., exposure to delinquent peers, domestic conflict, exposure to community violence), in addition to an adolescent's mental health symptoms, directly influence adolescents' substance use. This chapter also assesses whether the direct effects of delinquent peers, domestic conflict, and community violence are moderated by community cohesion.

RESEARCH QUESTIONS

This chapter advances two questions:

1. How are the patterns of relations among exposures to community and domestic violence, community cohesion, delinquent peers, symptoms of PTSD, and delinquent behavior related to substance use in African American adolescents living in public housing?
2. Is there evidence that community cohesion moderates the relationship, if any, between external risk factors (e.g., domestic violence, delinquent peers) and substance use?

METHODS

Research Settings

This paper uses data from youth in Washington DC, New York City, and Philadelphia. These were the cities with complete data available on all substance use/abuse variables.

Measures

Measures used included the following:

1. Alcohol, tobacco, and marijuana use was assessed using the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (2011).
2. Exposure to delinquent peers was assessed using the Self-Reported Exposure to Deviant Peers Scale (Eliot 1987).
3. Delinquent behavior was assessed using the Self-Reported Delinquency Scale (Elliot 1987).
4. PTSD symptoms were measured using the Impact of Event Scale (Horowitz, Wilner, & Alvarez 1979).
5. Domestic violence was assessed using the Family Conflict Scale (Barbarin, Richter, & deWet 2001).
6. Social cohesion was assessed using the Subjective Neighborhood Scale (Aneshensel and Sucoff 1996).
7. Exposure to community violence was assessed using the Survey of Exposure to Community Violence: Self-Report Version (Richter & Martinez 1990).

Analytic Procedures

The primary analytic procedure included a six-step sequential regression analysis. Controls (e.g., age, gender, research site) were entered in the first step. The second step included individual level correlates (e.g., symptoms of PTSD, annual prevalence of delinquency). Exposure to delinquent peers was entered in the third step. The fourth step included domestic conflict, while exposure to community violence and social cohesion were entered in the fifth step. The sixth step included six two-way interaction terms (e.g., social cohesion by annual prevalence of delinquency, social cohesion by PTSD, social cohesion by exposure to delinquent peers, social cohesion by domestic conflict, social cohesion by witnessing community violence, and social cohesion by victimization by community violence). In addition to sequential regression analysis, results from descriptive statistics (means and standard deviations), *t*-tests, bivariate correlations, and one-way analysis of variance are reported.

Prior to the analyses, data were evaluated for missing observations, outliers, normality, multicollinearity, and homoscedasticity. Maximum missing scores, on selected observations, were less than 3 percent. Listwise deletion was employed. No departures from normality were observed for study variables. Regression diagnostics (e.g., scatter plot of the standardized residual and the standardized predictors, variance inflation factors, and tolerance values) indicated that the assumptions of regression were met. All variables were centered to reduce entering multicollinearity into the model when assessing interaction effects.

RESULTS

Sample Characteristics

This chapter uses a sample of 663 youth: 167 from Washington DC, 347 from New York, and 149 from Philadelphia. The age range of the sample was from 13 to 19 years, with a mean age of 15.4 years and a standard deviation of 2.4 years. Females were 48 percent of the sample.

Bivariate Analyses

Males reported a significantly higher prevalence of substance use, delinquent behavior, and exposure to household conflict. Females, on the other hand,

TABLE 6.1 Ranges, Means, and Standard Deviations for Sample and *T*-Test Statistics by Gender

VARIABLES	RANGE	ENTIRE SAMPLE (*n* = 656)		MALES (*n* =343)		FEMALES (*n* =313)		*t*-TEST
		MEAN	SD	MEAN	SD	MEAN	SD	
Age	13–19	15.38	2.41	15.55	2.43	15.19	2.37	NS
Substance use	3–13	5.00	3.15	5.30	3.39	4.66	2.84	−2.63**
Posttraumatic stress disorder	13–52	25.05	10.4	23.55	9.66	26.69	10.94	3.87***
Delinquent behavior	14–63	21.78	8.93	23.31	10.08	20.09	7.12	−4.75***
Delinquent peers	14–70	25.71	9.72	27.28	10.41	23.99	8.6	−4.42***
Domestic conflict	10–40	14.21	5.42	14.72	5.77	13.66	4.97	−2.50**
Witness of community violence	13–52	23.55	7.37	23.35	7.03	23.74	7.68	NS
Victim of community violence	13–48	19.94	6.53	20.41	6.88	19.42	6.09	NS
Social cohesion	3–12	6.12	1.92	6.29	1.96	5.93	1.85	−2.39**

NS, not significant; *$p < .05$, **$p < .01$, ***$p < .000$.

reported a significantly higher prevalence of PTSD symptoms. Direct and indirect exposure to community violence did not differ by gender (table 6.1).

Substance use had a significant positive bivariate relationship with age, symptoms of PTSD, delinquent behavior, exposure to delinquent peers, exposure to household conflict, and direct and indirect exposure to community violence. The annual prevalence of substance use was unrelated to community cohesion at the bivariate level (table 6.2).

Multivariate Analysis

Results show that the overall regression model was significant, explaining 26 percent of the variance in substance use [$F^{(14,645)} = 17.37$; $R^2 = 25.9$; $p < .001$]. Controls (age, gender, and research city) uniquely accounted for 15 percent of the variation in substance use [$F^{(3,652)} = 39.97$; $R^2 = 15.5$; $p < .001$]. Coefficient estimates indicate that being male and older is

TABLE 6.2 Bivariate Correlation Coefficients for Study Variables

VARIABLES	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Age		.380**	.046	.074	.096*	.066	.094*	.059	−.018
2. Substance use			.148**	.266**	.254**	.249**	.228**	.190**	−.042
3. Posttraumatic stress disorder				.063	.082*	.129**	.105**	.083**	−.057
4. Delinquent behavior					.526**	.448**	.433**	.333**	.189**
5. Delinquent peers						.346**	.271**	251**	.056
6. Domestic conflict							.028	086*	.082*
7. Witness of community violence								.755**	.028
8. Victim of community violence									.086*
9. Social cohesion									

*$p < .05$, **$p < .01$, ***$p < .000$.

associated with increased substance use. Symptoms of PTSD and delinquent behavior contributed a significant and independent 7 percent of the variance in substance use [$F_{(change)} = 29.06$; $\Delta R^2 = .069$, $p < .001$]. Coefficient estimates suggest that symptoms of PTSD and delinquent behavior are both positively related to substance use.

Peers' delinquent behavior explained a statistically significant and unique 1 percent of the variance in the model [$F_{(change)} = 8.34$; $\Delta R^2 = .011$; $p < .01$]. Coefficient estimates indicate that greater exposure to delinquent behaviors is associated with increased substance use. Household conflict also reached statistical significance and uniquely contributed 1 percent of the variance in substance use [$F_{(change)} = 9.14$; $\Delta R^2 = .011$; $p < .01$]. Neighborhood correlates (witnessing and victimization by community violence and community cohesion) explained 1 percent of the variance in substance use [$F_{(change)} = 3.79$; $\Delta R^2 = .013$; $p < .01$]. Coefficient estimates indicate that witnessing community violence is positively related to substance use, while community cohesion is inversely related to substance use. Victimization by community violence was unrelated to adolescents' substance use.

The interaction terms explained a significant and unique 1 percent of the variance in the model [$F_{(change)} = 3.71$; $\Delta R^2 = .017$; $p < .01$]. Coefficient estimates suggest that the positive relationship between exposure to delinquent peers and substance abuse becomes significantly weaker as community

TABLE 6.3 Sequential Regression: Criterion Variable ATOD

VARIABLE	MODEL 1			MODEL 2			MODEL 3		
	B	SE	*t*	*B*	SE	*t*	*B*	SE	*t*
Intercept	−2.84	0.737	−3.85***	−5.11	0.772	−6.62***	−5.45	0.766	−7.03***
Age	0.494	0.047	10.44***	0.468	0.045	10.2***	0.461	0.045	10.1***
Gender	0.472	0.228	2.06*	0.354	0.226	1.56	0.289	0.225	1.28
Symptoms of posttraumatic stress disorder (PTSD)				0.04	0.011	3.78***	0.038	0.011	3.58***
Delinquent behavior (DB)				0.079	0.012	6.32***	0.058	0.014	4.01***
Exposure to delinquent peers (EDP)							0.039	0.013	2.98**
Domestic conflict (DC)									
Witness of community violence (WCV)									
Victim of community violence (VCV)									
Social cohesion (SC)									
PTSD × SC									
DB × SC									
EDP × SC									
DC × SC									
WCV × SC									
VCV × SC									
R		0.39			0.472			0.483	
R^2		0.152			0.223			0.233	
ΔR^2		0.149***			0.218***			0.227**	
$R^2_{(change)}$					0.071			0.01	
$F_{(change)}$					29.58			8.87	
F		$F_{(2,653)} = 58.56$***			$F_{(4,651)} = 46.63$***			$F_{(5,650)} = 39.53$***	

cohesion increases. Furthermore, the positive relationship between witnessing community violence and substance abuse becomes significantly weaker when community cohesion increases. The relationships between household conflict and victimization by community violence and substance abuse did not depend on levels of community cohesion (table 6.3).

TABLE 6.3 (*Continued*)

MODEL 4			MODEL 5			MODEL 6		
B	SE	*t*	*B*	SE	*t*	*B*	SE	*t*
−5.85	0.780	−7.50***	−5.52	0.867	−6.37***	−7.20	1.73	−4.16***
0.458	0.045	10.19***	0.447	0.045	9.99***	0.441	0.044	9.97***
0.272	0.224	1.21	0.326	0.223	1.46	0.281	0.221	1.27
0.035	0.011	3.25**	0.031	0.011	2.96**	−0.006	0.035	−0.177
0.042	0.015	2.78**	0.043	0.016	2.71**	0.197	0.054	3.65***
0.034	0.013	2.55*	0.030	0.013	2.24*	0.052	0.039	1.33
0.071	0.023	3.17**	0.066	0.023	2.92**	−0.089	0.074	−1.20
			−0.022	0.026	−0.848	−0.233	0.089	−2.61**
			0.052	0.022	2.34*	0.273	0.072	3.79***
			−0.119	0.057	−2.08*	0.174	0.250	0.695
						0.006	0.006	1.13
						−0.021	0.007	−2.97**
						−0.005	0.006	−0.837
						0.023	0.011	2.10*
						−0.037	0.011	−3.27**
						0.035	0.014	2.48*
0.495			0.508			0.535		
0.245			0.258			0.286		
0.238**			0.248**			0.270***		
0.012			0.013			0.028		
10.06			3.87			4.21		
$F_{(6,649)} = 35.08$***			$F_{(9,646)} = 24.99$***			$F_{(15,640)} = 17.13$***		

ATOD, alcohol, tobacco and other drugs; SE, standard error; *$p < .05$, **$p < .01$, *** $p < .000$.

DISCUSSION

Various contextual and behavioral domains tend to influence substance use in this sample of vulnerable youth. More specifically, in our study, males reported a significantly higher prevalence of both substance use and delinquent behavior than females. On the other hand, females accounted for significantly greater symptoms of PTSD than males, despite the fact that males were exposed to greater household conflict. These observations are consistent with previous research on youth in public housing (DuRant et al. 2000). Also, male gender and older age were predictors of increased substance use. Furthermore, symptoms of PTSD and delinquent behavior were both positively related to substance use. Similarly, greater exposure to delinquent peers was associated with an increase in substance use. These findings have, in fact, been reported in prior research (Silverman et al. 2001; Vaughn, Beaver, & DeLisi 2009). We also noted that household conflict and witnessing community violence were positively related to substance use, whereas community cohesion was negatively related to alcohol, tobacco, and marijuana use. These findings provide further support for the proposition that use of alcohol and other drugs may be a coping mechanism used to manage difficult feelings and memories of trauma (Cooley-Quille et al. 2001; DuRant et al. 2000).

Importantly, we found that the relationship between exposure to delinquent peers and substance abuse was moderated by increases in community cohesion; this is consistent with previous research suggesting that community cohesion has the potential to cushion negative behavioral effects (Hawkins et al. 2007). In addition, a positive relationship between witnessing community violence and substance use was also moderated by increases in community cohesion. This observation may have important implications for youth in urban public housing, and it points to the role that community cohesion plays in facilitating a youth's positive adaptation. Other scholars have made similar observations (Aneshensel & Sucoff 1996; Zimmerman et al. 2000). Importantly, these findings complement treatment research on the effectiveness of individual and family interventions for reducing alcohol and cannabis use among adolescents (Bender et al. 2011; Tripodi et al. 2010; Vaughn & Howard 2004).

Community cohesion served as a moderating influence in this study, pointing to the need to include this in conceptual models on adolescent

development in adverse environments, such as public housing. The integrated model that guides this research posits that ultimate macrolevel factors (isolation and segregation) give rise to both promotive and inhibiting environments for youth and that community cohesion is one prosocial source that can blunt maladaptive behaviors. Drug trafficking, incivility, community and domestic violence, dilapidation, deviant peer groups, deviant adult males, and further isolation have direct effects on provoking anxiety and depression in youth who are perhaps biologically predisposed for these internalizing disorders. In turn, substance use is one coping mechanism that is employed by youth to counteract the emotional turmoil and trauma in their lives. This not only sets many youth on a pathway toward addiction but also exposes them to further risk (D'Amico et al. 2008). Larger contextual effects, such as community cohesion, can possibly reduce the deleterious effects of substance use for these youth by enhancing caregiver or adult monitoring of behavior (Piko & Kovacs 2010). This form of biosocial theorizing, which involves successive levels of context, is gaining momentum as researchers realize that transdisciplinary approaches are necessary for solving complex social problems (Vaughn 2007).

Limitations

Our study findings need to be interpreted within the context of several limitations. First, convenience sampling (e.g., voluntary participation) was employed. Second, there were minor variations in data collection sites. For example, data collection at sites 1 and 3 occurred in community centers, whereas data collection at site 2 occurred in a social service agency located in the housing development. The cross-sectional approach used in the study limits its ability to establish temporal ordering of variables necessary to infer causation. Thus, subjective appraisals of community cohesion may influence, and in turn be influenced by, adolescents' substance use. Furthermore, an adolescent's subjective appraisal of community cohesion may be influenced by his or her family's tenure and status in the housing development. That is, families with intergenerational tenure may have higher status and more elaborate social networks, which may contribute to higher perceived community cohesion among youth in these families. It should be noted that other predictors (not included in this analysis) such as depression, sensation-seeking temperament, attitudes toward drug use, and access

to drugs might also influence substance use. Furthermore, the accuracy of the data is limited by the accuracy to which youth recall and self-report their perceptions, feelings, and behaviors.

Conclusions from this study are based on a sample of youths from public housing developments in three large cities. Generalizing these findings to youths from other public housing types (e.g., rural housing developments, Section 8, and HOPE IV communities) should be done with caution. These limitations notwithstanding, it should be noted that the characteristics of the sample have many similarities to other studies on youth in public housing using random sampling techniques (DuRant et al. 2000).

Implications

Several implications emerge that are important for providing insight to guide policy decisions and the development of interventions to support positive adaptations among youth in urban public housing. Although, as noted by Sampson (2003), the science of urban ecology in relation to individual outcomes is relatively young, several suggestions can be proffered. A full discussion of the policy and practice implications of this chapter is provided in part 3 of this book.

7

The Relationship Between Neighborhood Risk and Adolescent Health-Risk Behaviors

A FOCUS ON ADOLESCENT DEPRESSIVE SYMPTOMS

▸ *SHARON F. LAMBERT, CRYSTAL L. BARKSDALE, AND VON E. NEBBITT*

IT HAS BEEN WELL ESTABLISHED that high-risk behaviors among adolescents, such as substance use and unprotected or early sexual behavior, place adolescents at increased risk for several negative outcomes. Although current rates of adolescent alcohol and substance use are significantly lower than the peak rates in the 1970s and 1980s (Mulye et al. 2009), trends remain troubling. It is estimated that 26 percent of youth are considered to be heavy drinkers (i.e., they consume five or more drinks within several hours), and 20 percent of youth currently use marijuana (Centers for Disease Control and Prevention 2008). Similarly, although more than one-third of youth are currently sexually active, it is estimated that only 62 percent of them regularly use condoms (Centers for Disease Control and Prevention 2008). In addition, it is estimated that almost half of the annual 20 million new cases of sexually transmitted infections (STIs) occur among 15- to 24-year-olds (Centers for Disease Control and Prevention 2013; Weinstock, Berman, & Cates 2004). High-risk adolescent behaviors, such as substance use and risky sexual behavior, are significantly related to adverse outcomes, including depression and anxiety (e.g., Hallfors et al. 2005; Mason & Korpela 2009), poor self-esteem (e.g., Ethier et al. 2006), increased difficulties with self-control and emotion regulation

(e.g., Fishbein et al. 2006), and increased risk of STIs and human immunodeficiency virus (HIV; e.g., Taylor-Seehafer, & Rew 2007). These adverse outcomes highlight the need to better understand the etiology of health-risk behaviors in order to inform preventive interventions. However, contextual determinants beyond the family and peer domains are not well understood.

Ecological models highlight the neighborhood environment as an important context for understanding developmental outcomes. These models suggest that the effects of the neighborhood may be direct and indirect, and they interact with other contexts important for development. Only recently, however, has the neighborhood context been integrated into studies examining the etiology of health-risk behaviors. This research has found that neighborhoods with a high concentration of poverty, high disorganization, and low social cohesion generally have higher rates of adolescent problem behaviors (Lanctot & Smith 2001; Seidman et al. 1998; South & Baumer 2000).

Neighborhood institutional resource models, collective socialization models, and contagion or epidemic models provide frameworks for understanding the observed associations between neighborhood characteristics and youth problem behaviors (Jencks & Mayer 1990). Resource models highlight police controls, as well as the availability and accessibility of neighborhood resources that promote healthy developmental outcomes (e.g., libraries, hospitals, community centers). Collective socialization models emphasize the importance of adult role models, supervision and monitoring of youth activities by neighborhood adults, and social organization for promoting positive youth adjustment. Contagion or epidemic models suggest that the negative behavior of neighborhood adults and peers spreads and can affect youth problem behavior, in part through social learning (Leventhal & Brooks-Gunn 2000). Although much of the research examining neighborhood and community context effects on adolescent development has focused on structural characteristics of neighborhoods such as income, employment rates, and residential instability (Leventhal & Brooks-Gunn 2000), youth perceptions of their neighborhoods are increasingly recognized as a valid indicator of the neighborhood context (e.g., Bass & Lambert 2004), with important implications for adolescent health-risk behaviors.

NEIGHBORHOODS AND SUBSTANCE USE

Neighborhood poverty, crime, and social disorganization, as assessed using census-based indicators, have been linked with increased substance use (for a review, see Scheier et al. 2001). In addition, adolescents' subjective experience of their neighborhood environments, such as the perception of danger or threat, perception of drug use in the neighborhood, and perception of crime and violence, has been linked with adolescent substance use outcomes. For example, perceived neighborhood stress (Scheier et al. 2001) and perceived drug use in the neighborhood (Blount & Dembo 1984; Dembo et al. 1985) have been found to predict alcohol and substance use among racial and ethnic minority youth. Similarly, Lambert et al. (2004, 2005) found that African American adolescents who perceived more violence and drug activity in their neighborhoods were more likely to use substances than African American adolescents without such negative neighborhood perceptions.

It should be noted, however, that drug activity and the visibility of drug sales in a neighborhood do not necessarily indicate a high rate of substance use (Saxe et al. 2001). For example, drug sales may be a reliable source of income for some youth, but drug use may be considered unacceptable (Feigelman, Stanton, & Ricardo 1993). Thus, neighborhoods may provide access to substances, but substance use likely depends on norms and beliefs about use, and the presence, absence, or quality of resources that promote healthy adjustment and discourage use (Allison et al. 1999).

NEIGHBORHOODS AND SEXUAL RISK-TAKING

Neighborhood disadvantage has been linked with several risky sexual behaviors and outcomes, such as having sex more frequently and with several partners (e.g., South & Baumer 2001; Ramirez-Valles, Zimmerman, & Newcomb 1998), inconsistent contraceptive use (Baumer & South 2001), and teenage childbearing (e.g., South & Baumer 2001). Research examining neighborhood disadvantage and the timing of sexual activity, however, has produced mixed results (Browning et al. 2008; Dupere et al. 2008). There are specific elements of the neighborhood that have been associated with an adolescent's sexual-risk behavior, including the presence of

community-based sexual health services, the demography of the community (Billy, Brewster, & Grady 1994), and collective efficacy (Browning et al. 2008). While there are an increasing number of studies that have attempted to identify how these specific community elements, or mechanisms, are related to sexual-risk behavior (e.g., South & Baumer 2001; Browning et al. 2008; Cubbin et al. 2005), there has not been a systematic investigation into how youth-level factors, which may be affected by neighborhood factors, affect the relationship between neighborhood disadvantage and sexual-risk behaviors.

DEPRESSION AS A MEDIATOR OF THE LINK BETWEEN NEIGHBORHOOD AND HEALTH-RISK BEHAVIOR

The structural and social characteristics of the neighborhood are increasingly being recognized as having implications on many types of mental health problems among children and adolescents, including internalizing problems such as depression (Gutman & Sameroff 2004; Leventhal & Brooks-Gunn 2000; Xue et al. 2005). Characteristics of neighborhoods may influence the number and intensity of stressors and negative life events that individuals experience, increasing their vulnerability to depression (Cutrona, Wallace, & Wesner 2006). For example, resource-poor neighborhoods may be characterized by social and physical stressors such as crime, violence, drug sales and activity, graffiti, and vandalism—each of which has been linked with increased levels of psychological distress among residents (Aneshensel & Sucoff 1996; Latkin & Curry 2003). Similarly, fear of crime/violence and low perceived neighborhood safety have been linked with depressive symptoms, even after adjusting for known correlates of depression (Zule et al. 2008). Deteriorating physical conditions in the neighborhood, poor housing quality, noise, and crowding also have been identified as predictors of psychological distress. To the extent that these types of neighborhood disorder are experienced as uncontrollable, individuals may endorse symptoms of learned helplessness, feel hopeless, or endorse other symptoms of depression (Latkin et al. 2007). Neighborhoods with few institutional supports or networks of informal supports that can ameliorate feelings of depression may have higher rates of depression-related concerns.

Of concern are the well-documented associations between adolescents' depressive symptoms and their involvement in high-risk behaviors. For

example, depressive symptoms have been linked with adolescents' increased delinquency (Leas & Mellor 2000), physical fighting (Pesa et al. 1997), risk for community violence exposure (Borowsky & Ireland 2004; Lambert et al. 2005), sexual-risk behaviors (Lehrer et al. 2006), and STI- and HIV-associated attitudes and sexual behaviors (DiClemente et al. 2001). Similarly, hopelessness, a significant correlate of depression, has been linked with adolescent participation in high-risk behaviors, including violence, substance use, and sexual behavior (Bolland 2006; Harris, Duncan, & Boisjoly 2002). These links between depression and health-risk behaviors suggest that depression may mediate observed associations between neighborhood risk and adolescent health-risk behaviors.

The available evidence regarding processes that account for the observed associations between neighborhood conditions and health-risk behaviors confirms that psychological distress is an important mechanism linking neighborhood characteristics and individual behavior. For example, research with adult samples has found that the effects of neighborhood disadvantage and disorder on substance use are indirect, operating through psychological distress (Boardman et al. 2001; Latkin et al. 2007). Similarly, Hill and Angel (2005) found that anxiety and depression partially mediated the association between neighborhood disadvantage and heavy drinking, providing support for tension reduction and self-medication hypotheses (Greeley & Oei 1999) that individuals use substances to reduce stress or negative affect. A similar process may operate for sexual risk-taking behaviors.

MODERATORS OF THE RELATIONSHIP BETWEEN NEIGHBORHOOD, DEPRESSION, AND HEALTH RISK

It is important to recognize that numerous factors may determine whether and the degree to which exposure to neighborhood stress is associated with adolescents' depressive symptoms and health-risk behavior, as evidenced by resilience among youth who reside in challenging environments (Fergus & Zimmerman 2005). Moreover, conceptualizations of the tension reduction hypothesis propose that only some individuals will use substances to manage their negative affect (Hussong et al. 2001) and highlight the importance of considering aspects of the social context that may moderate the associations between stress, depression, and

health-risk behaviors. Prior research has highlighted gender, age, parenting behavior, and peer affiliations as factors that may moderate the effects of the neighborhood environment on adolescent developmental outcomes.

Gender Differences

Male adolescents may have earlier and more frequent unsupervised exposure to the neighborhood environment (Leventhal & Brooks-Gunn 2000) and therefore more opportunities to engage in problem behaviors. Relatedly, males generally report more exposure to community violence than females (e.g., Buka et al. 2001) and may be similarly exposed to other neighborhood risks more often than females. Some research has shown that the neighborhood environment may have stronger effects on males than females (Leventhal & Brooks-Gunn 2000). For example, Ramirez-Valles, Zimmerman, and Juarez (2002) found that neighborhood poverty was associated with timing of first intercourse for adolescent males but not females.

Parent Supervision

Considerable research has documented the significant role of parental monitoring and supervision in curbing youth problem behaviors (e.g., Dishion & McMahon 1998). In addition, these parenting behaviors may mitigate the effects of the neighborhood environment on youth adjustment when parents limit their adolescents' exposure to the neighborhood and neighborhood activities. For example, Browning, Leventhal, and Brooks-Gunn (2005) found that inconsistent supervision was associated with adolescent early sexual activity, particularly for adolescents living in disadvantaged neighborhoods. In contrast, parental supervision and monitoring of adolescent activities have been associated with adolescents not engaging in sexual intercourse; among sexually active adolescents, these parenting behaviors have been linked with older age at first intercourse, using protection, having fewer partners, and avoiding adolescent pregnancy (Miller, Benson, & Galbraith 2001). Still, it should be noted that the utility of parent management strategies may vary across neighborhoods (Howard et al. 2003).

Deviant Peer Affiliation

Considerable research has linked adolescents' health-risk behaviors with their friends' deviant or risky behaviors (e.g., French & Dishion 2003; Prinstein, Boergers, & Spirito 2001). The consistent links between deviant peer affiliation and adolescent problem behaviors, such as substance use, violent offending, and early and high-risk sexual behaviors (Gifford-Smith et al. 2005), may exist because adolescents often are reinforced for behaviors that conform to peer expectations and pressures (Prinstein, Boergers, & Spirito 2001). Of relevance to substance use, adolescents may learn how to manage emotional states from their peers (Brown, Dolcini, & Leventhal 1997), and it has been proposed that self-medication may be more common in settings where substance use is reinforced as a coping strategy (Hussong et al. 2001).

The Present Study

Understanding how neighborhood and community-level risk may influence adolescent health-risk behavior is important to inform interventions to mitigate these risks and promote healthy developmental outcomes. Thus, the present study examines whether neighborhood risk is associated with substance use and sexual risk-taking behaviors, and whether these associations are accounted for, at least in part, by adolescents' depressive symptoms. In keeping with ecological models highlighting the importance of interactions between the many contexts in which youth develop, individual, family, and peer factors are examined as possible moderators of the linkages between neighborhood risk, depressive symptoms, and health-risk behaviors.

ANALYTIC STRATEGY

Path analysis was used to examine the hypothesized relationships among the constructs. These analyses were conducted using M*plus* 5.21 (Muthén & Muthén 2009), using full information maximum likelihood estimation, which allows for missing data under missing at random assumptions (Little & Rubin 1990; Rubin 1987), where participants who have data on at least one study variable are included in the analysis. Multiple

indicators of fit were used to evaluate the models: chi-square, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Hu and Bentler (1999) suggested that CFI values greater than .95 and RMSEA values less than .08 represent an acceptable fit; RMSEA values equal to or less than .05 represent a good fit (Browne & Cudek 1993).

Mediation was tested with three models according to guidelines outlined by Holmbeck (1997). First, the direct effect of neighborhood risk on the health-risk behaviors was assessed. Next, the indirect effects were assessed. Specifically, the fit of a model with paths from neighborhood risk to the mediator, depressive symptoms, and from depressive symptoms to the health-risk behaviors was tested. A third model including the indirect and direct effects was tested to determine whether the direct effect was reduced with the hypothesized mediators in the model. A reduction in the direct effect suggests mediation. To provide an additional test of mediation, the confidence interval–based test of mediation recommended by MacKinnon et al. (2002) was performed to determine the significance of the indirect effect; if the confidence interval for the indirect effect does not contain zero, the indirect effect is considered significant.

Because participants were nested within housing developments, housing development was specified as a cluster variable. Using this strategy, standard errors were adjusted to account for the nonindependence of observations within the cluster (i.e., housing development). The effect of participants' school on the outcomes was controlled in each analysis.

To examine the hypothesized moderators, gender, parental supervision, and deviant peer affiliation, multiple group analyses were performed. For these analyses, the continuous moderators were dichotomized. A median split was used to dichotomize parental supervision and deviant peer affiliation into *high* and *low*. Each moderator was examined in a separate model. Models in which paths were freely estimated for each value of the dichotomous moderator were compared with models in which paths were constrained to be equal for the different levels of the moderator. A significant decrement in chi-square model fit for the constrained model provides evidence of significant moderation in the path that was constrained.

RESULTS

Descriptives

For this study, substance use was operationalized as the mean number of times participants reported they had used tobacco, alcohol, or marijuana in the past year. Approximately 40 percent of participants reported that they had used alcohol at least once, whereas approximately 30 percent and 20 percent of adolescents reported using marijuana and tobacco, respectively, at least once. Males reported using marijuana more than females ($\chi^2(6) = 15.16$, $p < .05$) and they reported slightly more tobacco use than females ($\chi^2(5) = 9.43$, $p = .09$). Adolescents' sexual-risk behavior was based on the sum of two items about their last sexual experience: whether or not participants drank alcohol or used drugs before or during sex, and whether or not they had used a form of protection. Possible scores ranged from 0 to 2. Because only four participants reported engaging in two sexual-risk behaviors, scores were dichotomized such that a score of 1 indicated that participants had engaged in one or two sexual-risk behaviors.

Path Analysis

Path coefficients and fit statistics for path models are presented in table 7.1. The first model examining the direct effect of neighborhood risk on substance use and sexual-risk behaviors revealed a significant association between neighborhood risk and sexual-risk behaviors (standardized path coefficient = .17, $p < .001$). Neighborhood risk was not associated with substance use. The indirect model (model 2) revealed significant associations between neighborhood risk and depressive symptoms, as well as between depressive symptoms and each health-risk behavior; however, this model provided a poor fit to the data, as evidenced by the comparative fit index (CFI) and Tucker Lewis index (TLI) (see table 7.1). In the third model, neighborhood risk was associated with increased depressive symptoms, but depressive symptoms were not associated with sexual risk. Moreover, the direct path from neighborhood risk to sexual risk remained significant while controlling for the indirect paths. Thus, depressive symptoms did not mediate the association between neighborhood risk and

TABLE 7.1 Path Estimates and Fit Statistics for Path Analytic Models

	MODEL 1	MODEL 2	MODEL 3
Model			
Neighborhood risk → sexual risk	**.17**		**.16**
Neighborhood risk → substance use	.00		−.03
Neighborhood risk → depressive symptoms		**.16**	**.12**
Depressive symptoms → sexual risk		**.26**	.12
Depressive symptoms → substance use		**.25**	**.22**
Tests of indirect associations			
Neighborhood risk → depressive symptoms → sexual risk	NA	**.04**	.01
Neighborhood risk → depressive symptoms → substance use	NA	**.04**	**.03**
Model fit statistics			
χ^2 (degrees of freedom)	0.00 (0)	5.76 (2)	1.79 (1)
Comparative fit index	1.0	.879	.992
Tucker Lewis index	1.0	.818	.967
Root mean square error of approximation	.000	.046	.030

Coefficients in bold are significant at $p < .05$. All coefficients are standardized. NA, not available.

sexual-risk behavior. There was a significant indirect effect of neighborhood risk on substance use (neighborhood risk → depressive symptoms → substance use indirect pathway, $z = 2.43$, $p < .001$) in the third model.

To determine whether gender, parental supervision, or deviant peer affiliation moderated the indirect pathways, multiple group analyses were performed. In terms of gender differences, the association between depressive symptoms and substance use was slightly stronger for males than for females ($\Delta\chi^2 = 3.54$, $p = .06$), and the association between depressive symptoms and risky sexual behavior was slightly stronger for males than for females ($\Delta\chi^2 = 3.23$, $p = .07$). Model comparisons revealed that the association between neighborhood risk and depressive symptoms was stronger for adolescents with high paternal supervision than for adolescents with low paternal supervision ($\Delta\chi^2 = 5.22$, $p < .05$). Because of this difference, the pathway of neighborhood risk to depressive symptoms to substance use was stronger for adolescents with high paternal supervision. Contrary

to expectation, the association between neighborhood risk and sexual-risk behavior was stronger for adolescents with low deviant peer affiliation than for adolescents with high deviant peer affiliation ($\Delta\chi^2 = 5.71$, $p < .05$). The association between depression and substance use was marginally stronger for adolescents with high deviant peer affiliation than for adolescents with low deviant peer affiliation ($\Delta\chi^2 = 3.65$, $p = .06$).

DISCUSSION

Ecological models highlight the significance of the neighborhood context for understanding youth health outcomes. However, only recently has empirical research examined which aspects of the neighborhood context may influence health-risk behaviors. The current research examined depressive symptoms as a possible mechanism linking adolescents' perceptions of neighborhood disorder with sexual-risk behavior and substance use, and whether individual, family, and peer influences moderated the association between neighborhood disorder and these health-risk behaviors. Results revealed an indirect effect of neighborhood disorder, such that neighborhood risk was associated with depressive symptoms, which in turn were associated with substance use. However, neighborhood risk remained associated with sexual-risk behavior after accounting for depressive symptoms, suggesting that other mechanisms are responsible for the association between neighborhood disorder and adolescents' sexual-risk behavior.

Neighborhood Disorder, Depressive Symptoms, and Health-Risk Behaviors

Findings of this research highlight psychological distress as one mechanism that may link neighborhood disorder with increased adolescent substance use. Although conclusions regarding causality are not appropriate given the cross-sectional data, findings suggest that neighborhood disorder and depressive symptoms may co-vary in ways that increase adolescents' risk for substance use, consistent with prior research documenting longitudinal associations between neighborhood risk and later substance use (e.g., Lambert et al. 2004). Nonetheless, it is important to note that depressive symptoms are just one of several possible psychological and physical responses to neighborhood disorder. If neighborhood disorder is not perceived as

stressful or youth with chronic exposures to neighborhood risks become desensitized, other types of adaptations may be observed. In addition, many adolescents show resilience in the face of neighborhood risk and psychological distress; this could serve to protect them from adverse outcomes.

That the association between depressive symptoms and substance was stronger for adolescents with high deviant peer affiliations was not surprising. Peers who exhibit deviant behavior may have greater access to substances, thereby increasing opportunities for adolescents to model this behavior or succumb to pressure to engage in behaviors consistent with their peers. In addition, the accepted norms and expectations for engaging in high-risk behavior may be particularly salient among such peer groups. Youth who participate in deviant or delinquent activities may do so, in part, because they have limited skills for adaptive coping; thus, they may be more likely to manage their negative affect with substances. Similarly, adolescents with fewer competences for prosocial behavior may drift toward peer contexts where behaviors such as substance use are encouraged and reinforced.

Different processes appear to link neighborhood disorder to substance use and sexual-risk behavior. While research suggests that depressed youth engage in more risky behaviors, including substance use and risky sexual behaviors, several other factors such as impulsivity and community norms for adolescent sexual behavior may better explain adolescents' involvement in sexual risk behaviors (Donovan 2004; Kahn et al. 2002) than depressive symptoms. Alternatively, it may be that consideration of heterogeneity in how adolescent depressive symptoms are expressed and experienced is important for understanding the link between neighborhood disorder and sexual-risk behavior. For example, youth with depressive symptoms that co-occur with risk-taking tendencies may experience different outcomes than youth with more internalized depression, who may be more likely to self-medicate with substances.

Only limited support was found for individual, family, and peer moderators of the link between neighborhood disorder, depressive symptoms and health-risk behavior. Prior research also has found limited support for maternal and paternal supervision as a protective factor against the adverse effects of neighborhood and community variables (e.g., community violence exposure). It has been suggested that the protective effects of these variables are only apparent in contexts of low risk (Ceballo et al. 2003; Sullivan, Kung, & Farrell 2004). In very high-risk neighborhoods,

community- and peer-level norms about acceptable and unacceptable behavior may be particularly salient for youth, making effective parental monitoring and supervision more difficult to achieve. Interestingly, results suggested that the association between depressive symptoms and the health-risk behaviors was somewhat stronger for males. Although these results should be interpreted with caution because the gender difference was only marginal ($p = .06$), this finding may reflect differences in norms for how males and females are expected to manage their negative affect. For example, it may be more acceptable for males to express their internal distress and negative affect via engaging in externalizing behaviors. In addition, females may have a larger repertoire of adaptive skills for managing their depressive symptoms.

Implications, Limitations, and Directions for Future Research

Our findings highlight the importance of the neighborhood context for adolescent health-risk behaviors. The direct association between neighborhood risk and sexual risk, as well as the indirect association linking neighborhood risk, depressive symptoms, and substance use, generally persisted across gender, parental supervision, and deviant peer affiliation, thus suggesting that interventions to prevent or reduce adolescent health-risk behaviors would benefit from an assessment of how adolescents experience and manage their neighborhoods. Additionally, comprehensive interventions targeting youth health-risk behaviors should consider community norms for expressing and managing feelings of distress, which include, but are not limited to, depressive symptoms. It also will be important for research and practice to identify the types of strengths and protective factors that youth and their families possess despite neighborhood risk, and how the presence of these factors may differentiate between youth who engage in health-risk behaviors from those who do not.

These results should be considered in the context of study limitations and suggest several directions for future research. The cross-sectional data examined here allowed a preliminary examination of associations between neighborhood disorder, depressive symptoms, and health-risk behaviors. However, longitudinal assessment of these constructs is necessary to determine whether neighborhood disorder predicts increases in depressive symptoms and whether depressive symptoms predict greater involvement

in health-risk behaviors. Reciprocal associations also should be examined in light of some research showing that adolescent substance use and sexual behavior predicts increased depression (e.g., Hallfors et al. 2005).

In addition, future research should consider whether the moderating effects of parent supervision and deviant peer affiliation vary by gender. For example, regarding parental supervision, it has been suggested that the quantity of behavioral controls parents exert varies for male and female adolescents, with females being monitored more than males (Leventhal & Brooks-Gunn 2000) and males being granted earlier and more unsupervised time in the neighborhood (Beyers et al. 2003). This gender difference in socialization suggests that the protective effects of parental regulatory behavior may be stronger for females than for males (Browning et al. 2005). Similarly, gender differences in socialization also can affect peer affiliation and expression of distress. This may be particularly relevant for health-risk behaviors for which the social and societal consequences are perceived to vary between males and females. For example, parents may monitor their female adolescents more because the consequences of early sexual activity (e.g., pregnancy) may affect females more strongly than males (Browning et al. 2005).

Neighborhood influences on adolescent outcomes are likely moderated by age because youth exposure to the neighborhood, participation in neighborhood activities, and perceptions of the neighborhood change with increasing age (Aber et al. 1997; Leventhal & Brooks-Gunn 2000). Future research should examine this possibility, and whether younger children still experience increased supervision if parents and caregivers work out of the home for long hours. For example, in some cases, younger children under the care of older siblings might be at greater risk for exposure to neighborhood risks, depending on the nature and amount of their siblings' involvement in unsupervised neighborhood activities.

Although this research examined parent and peer variables as possible moderators of the effect of neighborhood risk on health-risk behavior, these also may mediate the effect of neighborhood risk (e.g., Leventhal & Brooks-Gunn 2000). Thus, future research should consider both the moderating and mediating effects of parents and peers. Finally, in future research, it will be important to assess community norms about substance use and adolescent sexual activity because these interact with neighborhood disorder to predict health-risk behaviors.

8

Risk and Protective Factors of Depressive Symptoms

▸ *MARGARET LOMBE AND VON E. NEBBITT*

INTRODUCTION

AFRICAN AMERICAN ADOLESCENTS ARE ONE of the most vulnerable, victimized, and disenfranchised groups in contemporary American society (Gibbs & Huang 2003). Several theories attempt to explicate the myriad challenges that urban African American youth face (Herrnstein & Murray 1999; Jensen 1969; Ogbu 1985; Shuey 1966; Wilson 1987). Most of these theories are deficit-based, focusing on risk factors, maladaptations, and negative outcomes in youth. Deficit-based explanations have greatly increased our understanding of how risk factors in various domains (e.g., individual, peer, family, community) negatively affect African American youth. However, these approaches have failed to address multifinality in this vulnerable population of youth. Indeed, many urban African American youth avoid life-compromising circumstances and become well-functioning citizens (Furstenberg et al. 1999).

During the 1970s and 1980s, theories on child and adolescent development underwent a paradigm shift, which undergirded the development of new theoretical propositions and ushered in a systematic approach to understand factors that differentiated youth with positive adaptations from those with negative adaptations (Garmezy 1974; Rutter 1979; Werner & Smith 1982). The shift initiated a body of research that focused on "invulnerable" and "stress-resistant" children (Anthony 1987; Werner & Smith 1982). This emerging body of evidence has enhanced our understanding of how risk factors interact with protective factors to enhance positive adaptations in youth. Using a sample of 788 African American youth living in

urban public housing, this chapter contributes to the body of research by assessing how the downward extension of adult responsibilities to adolescence (i.e., adultification) and community cohesion buffer the effects of delinquent behavior, exposure to deviant peers, and exposure to neighborhood hazard on depressive symptoms.

OVERVIEW OF THE ISSUE

Significance of Community Context

African American youth are more likely than white and Latino youth to reside in urban neighborhoods marked by concentrated poverty and isolation (National Center for Child Poverty 2001; Urban Institute 1997). Theorists (Coll et al. 1996; Nebbitt et al. 2010) have argued that this experience can have a simultaneous inhibiting and promoting effect on youths' developmental competences. Indeed, youth and families must make positive adaptations to survive and thrive in harsh urban neighborhoods. Jarrett (2003) argued that one adaptation used by adolescents and families in low-income urban neighborhoods is accelerated development or the downward extension of adult responsibilities to adolescent offspring—a process conceptualized as *adultification*. Others (e.g., Cook 2000; Williams & Kornblum 1994) argued that nonfamilial community members facilitate adolescents' adaptation to life in urban neighborhoods through increased community cohesion and nurturing social networks.

Qualitative research (Jarrett 2003; Cook 2000) has suggested that unique individual and community adaptations promote resilience in urban African American adolescents. Despite this evidence, most quantitative research has focused on mainstream protective factors (i.e., intelligence quotient, internal locus of control and academic achievement), leading to the neglect of research examining how unique adaptations (adultification and collective cohesiveness) may buffer the negative effects of living in urban neighborhoods on adolescents' well-being.

REVIEW OF THE LITERATURE

Neighborhood Risk

The prevalence of adolescent exposure to neighborhood hazard and violence is well documented in the extant literature (Cooley-Quille et al. 2001;

Myers & Thompson 2000; O'Keefe 1997). During the past few decades, research has emerged linking exposure to community hazard and violence to a variety of emotional and behavioral problems in African American youth (Aneshensel & Sucoff 1996; Flannery, Wester, & Singer 2004; Gorman-Smith, Henry, & Tolan 2004; Myers & Thompson 2000; Schwartz & Gorman 2003). Among these are increased risks for symptoms of depression and anxiety disorders (Fitzpatrick & Boldizar 1993; Mazza & Reynolds 1999; Morenoff & Lynch 2004). This is an area of concern given the co-occurrence of depression and health-risk behavior, including suicide, in urban African American adolescents.

Delinquent Peers

The developmental period of adolescence involves individualization from family and identification with a peer group (Brown & Klute 2006). As a result of this change, peers exert relatively greater influence and form an important behavioral reference during adolescence. Research has documented similarities in levels of risk behavior among adolescents within the same peer group (Boyer, Tschann, & Shafer 1999). In fact, one of the most consistent and strongest predictors of adolescents' behavior is peer affiliations (e.g., Keenan et al. 1995). Moreover, research has reported a link between peer affiliation and emotional well-being in adolescents (Brendgen, Vitaro, & Bukowski 2000; Fergusson & Woodward 2002). For example, Brendgen et al. (2000) found that youth who affiliate with delinquent peers reported more depressive feelings compared to those who affiliate with nondelinquent peers. This observation has been reported by others (Nebbitt & Lombe 2008). A question of interest, therefore, may be whether unique adaptations to life in harsh urban neighborhoods buffer the negative effects of this experience.

Delinquent Behavior

The prevalence of co-occurring depressive disorders and problem behavior among adolescents is well established in the juvenile delinquency literature (Angold, Costello, & Erkanli 1999; Pliszka, Sherman, & Barrow 2000). Research suggests that delinquent youth have higher levels of mental disorders compared to nondelinquent youth (Huizinga & Jakob-Chien 1998).

Depression disorders have been identified as significant correlates of antisocial behavior among youth (Chiles, Miller, & Cox 1980; Pliszka, Sherman, & Barrow 2000; Vermeiren, Deboutte, & Ruchkin 2002). Studies with diverse groups of incarcerated and adjudicated youth seem to reflect these findings (Pliszka, Sherman, & Barrow 2000; Vermeiren, Deboutte, & Ruchkin 2002). It is estimated that approximately 60 percent of the youth in the juvenile justice system (residential and nonresidential) with a diagnosable mental disorder are African American (Teplin, Abram, & McClelland 2002; Wasserman et al. 2004). When adjusting for oppositional defiant disorder and substance abuse, depression is one of the most commonly diagnosed mental disorders among these youth (Shufelt & Cocozza 2007). The high prevalence of depressive disorders among African American youth in the juvenile justice system should be a major concern to the public health and mental health communities (Shufelt & Cocozza 2007). This situation may reflect inadequate community-based mental health surveillance systems and a lack of community-based mental health services in urban African American communities.

Adultification

The presumption that adolescence development is an extension of childhood implies some sort of moratorium transition before adolescents take on adult responsibilities (Luthar & Burack 2000). Notwithstanding the fact that for upper- and middle-income youth adolescence may be a hiatus, numerous complications arise when attempting to apply this presupposition of adolescence to urban low-income adolescents (Luthar & Burack 2000). African American adolescents living in urban neighborhoods are likely to undergo an alternative developmental trajectory (Jarrett 2003; McLoyd 1998). Due to various socioeconomic and cultural factors, urban African American adolescents are often prematurely required to assume adult roles and do not often experience adolescence as a transitional phase (Burton, Allison, & Obeidallah 1995).

Evidence has documented multiple environmental, social, and familial factors that urban African American youth must adapt to, which shape their developmental trajectories (Jarrett 2003). One salient developmental adaptation is adultification—the downward extension of adult responsibilities to adolescence (Jarrett 1990, 2003). Simply put, adultification is

the process through which an adolescent acquires or assumes behaviors and roles that are typically adult. Socialization into adult roles and behaviors may be influenced by circumstances that make up the subjective experience of an urban adolescent. Indeed, in an environment where a single parent may be overburdened by working multiple jobs or incapacitated by substance abuse, health problems, ineffective parenting, and/or premature parenting; a youth may rise to the challenge by assuming unmanned responsibilities, such as caring for siblings, household chores, and other adult tasks (Jarrett 2003). Adultification may be contentious for the youth in that while these adult roles and behaviors may be validated/affirmed by his or her family and community because the youth is performing critical tasks for the family, assuming such roles and behaviors may be frowned upon or even sanctioned because they diverge from what is defined/perceived as age-appropriate and normal in mainstream society, (e.g., scholastic success; Furstenberg et al. 1999). Because developmental competences are defined by the social context, it is likely that adultification may be a protective factor within urban neighborhoods (Ogbu 1985).

Although qualitative research has begun to pay attention to the process of adultification, there is a paucity of quantitative research that explores adultification as a developmental adaptation in urban minority youth (e.g., Jarrett 1990, 2003). Moreover, research efforts have not been devoted to understanding whether adultification buffers the negative aspects of life in urban environments. Our position is that adultification, among African American adolescents in public housing, may be a source of efficacious behavior and self-esteem that is validated by both a youth's family and community. Hence, it may serve as a protective factor.

Community Cohesion

Youth in urban neighborhoods often rely on various factors to help them overcome the harmful effects of their living environments. One such factor is social cohesion, perceived as supportive relationships beyond a youth's immediate home environment (Gutman, Sameroff, & Eccles 2002). Social cohesion generally consists of a network of peers and caring adults within a youth's community and is evaluated on the basis of people's perceptions of how community members relate to each other (Rountree & Warner 1999)

Evidence suggests that supportive relationships outside a youth's immediate family buffer environmental challenges by providing a youth with an avenue to process experiences with peers or caring adults within their community (Garbarino & Kostelny 1992; Sandler et al. 1989). Moreover, adolescents are more likely to avoid risky behaviors when they perceive themselves to be socially integrated and exposed to more community assets, including social support (Benson et al. 2006; Hawkins et al. 2007; Xue et al. 2005). Furthermore, higher perceived community cohesion is associated with higher perceived self-efficacy, which is associated with positive emotionality (Nebbitt 2009).

Although scholars are increasingly paying attention to the role of community assets, including social cohesion, in influencing outcomes among adults, few studies have examined community-level variables, such as social cohesion, as a potential mechanism moderating the effects of exposure to community violence in youth (e.g., Morenoff & Lynch 2004). A rigorous examination of these relationships may have important implications for promoting resilience among African American youth in urban public housing developments.

Resilience

Resilience research that focuses exclusively on urban African American adolescents is limited (Luthar 1991, 1995; Luthar, Doernberger, & Zigler 1993; Luthar & Zigler 1992; Miller & MacIntosh 1999). Specific theories to guide this research are also rare (see Coll et al. 1996 for an exception). Of the limited resilience research conducted with urban African American adolescents, studies have found that individual, family, and community features act as protective, compensatory, and vulnerability factors within high-risk situations. For example, an internal locus of control was found to be positively related to assertiveness in the classroom, and social expressiveness was found to be a protective factor against stress on youth popularity with their peers. Intelligence, on the other hand, was found to be a vulnerability mechanism under high-stress situations (Luthar 1991). Luthar (1995) also found, among a sample of inner-city African American adolescents, a gender difference in resilient functioning. She found that being female was associated with higher competences; however, for girls, early anxiety and depression were negatively related to later sociability and grades.

This review of the literature provides sound empirical evidence linking a number of ecological factors to African American adolescents' psychological functioning. We build on this evidence and the integrated model introduced in chapter 3 by exploring how individual and community factors moderate the relationship between neighborhood risk and youths' emotional well-being. We extend this area of research by assessing how unique (adultification and collective community) adaptations to life in urban public housing neighborhoods buffer the negative effects of living in these neighborhoods.

THEORETICAL ORIENTATION

The integrated model introduced in chapter 3 postulates that two salient constructs—adultification (Jarrett 2003) and community cohesion—in urban public housing communities buffer the negative effects of other risk factors within these communities. Therefore, we test the section of the model which posits that community risk, exposure to deviant peers, and delinquent behavior are positively related to depressive symptoms, and that community cohesion and adultification are negatively related to depressive symptoms. Furthermore, we test the section of the model which argues that the influences of community risk, exposure to deviant peers, and delinquent behavior on depressive symptoms are mitigated by social cohesion and adultification. Lastly, we test whether the relationships above depend on the research city (figure 8.1).

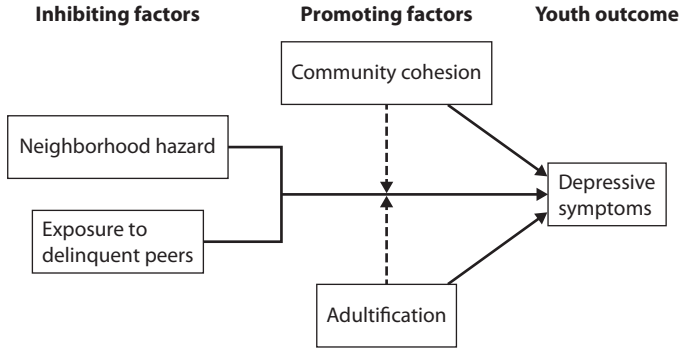

FIGURE 8.1 Ecological inhibiting versus promoting protective factor model.

Research Questions

This study advances three research questions:

1. How are community risk, community cohesion, peer behavior, delinquent behavior, and adultification related to depressive symptoms?
2. Is there evidence that the influences, if any, of community risk, peer behavior, and delinquent behavior on depressive symptoms are buffered by adultification and community cohesion?
3. How do relationships, if any, within housing developments differ by city of research?

METHODS

Research Sites

Data from all four cities (i.e., New York City, Philadelphia, St. Louis, & Washington, DC) were used for this chapter. It should be noted, however, that the second research site in New York City Ravenswood was excluded from the final analysis due to missing observations on key indicators. Protocol and procedures are described in chapter 4.

Measures

The following measures were used:

1. Depression was measured using the Center for Epidemiologic Studies Depression Scale (Radloff 1977).
2. Neighborhood risk and social cohesion were assessed using the Subjective Neighborhood Scale (Aneshensel & Sucoff 1996).
3. Exposure to delinquent peers was assessed using the Exposure to Delinquent Peers Scale from the National Youth Survey (Elliot 1987).
4. Adultification (e.g., the downward extension of adult responsibility to adolescents) was measured using the two items described in chapter 4.
5. Delinquent behavior was assessed using the Self-Report Delinquent Behavior Scale from the National Youth Survey (Elliot 1987).

Analytic Procedures and Regression Diagnostics

Prior to the analyses, data were evaluated for missing observations, outliers, normality, multicollinearity, and homoscedasticity. Maximum missing scores, on selected observations, were lower than 3 percent. Listwise deletion was employed. Seriously skewed observations were not detected. Regression diagnostics (e.g., scatter plot of the standardized residual and the standardized predictors, variance inflation factor, and tolerance values) indicated that the assumptions of our test were not violated. All variables were centered to reduce multicollinearity with the addition of interaction terms.

The primary analytic procedure included a general linear model (GLM). We used the custom function to create a direct and indirect effect model. The direct effects model included age, gender, research city, adultification, delinquent behavior, exposure to delinquent peers, neighborhood risk, and social cohesion. The two-way indirect model included six interaction terms: adultification by delinquency, adultification by exposure to delinquent peers, adultification by neighborhood risk, social cohesion by delinquency, social cohesion by exposure to delinquent peers, and social cohesion by neighborhood risk. The three-way interaction variables were research site × adultification × delinquent behavior; research site × adultification × delinquent peers; research site × adultification × neighborhood risk; research site × social cohesion × delinquent behavior; research site × social cohesion × delinquent peers; and research site × social cohesion × neighborhood risk. In addition to GLM, univariate and bivariate analyses were conducted.

RESULTS

Sample Characteristics

A total of 788 African American adolescents from public housing developments in four large U.S. cities participated in this study: 30.1 percent lived in New York City; 20.8 percent in Washington, DC; 30.2 percent in St. Louis; and 19 percent in Philadelphia. Ages ranged from 13 to 19 years, with a mean age of 15.6 years and a standard deviation of 2 years. The sample had slightly more males (52 percent). The sample reported a mean depression

TABLE 8.1 Descriptive Statistics and Comparison by Gender for Study Variables

VARIABLES	FULL SAMPLE		MALES (n = 411)	FEMALES (n =374)	
	RANGE	MEAN (SD)	MEAN (SD)	MEAN (SD)	t-TEST
Age	13–20	15.46 (2.36)	15.75	15.48	NS
Depressive symptoms	00–51	17.89 (11.41)	18.39 (11.67)	16.53 (9.78)	−2.62**
Delinquent behavior	00–63	21.27 (9.10)	23.269 (10.35)	19.05 (6.87)	−6.77***
Peer behavior	14–70	25.84 (10.54)	28.27 (11.25)	23.14 (8.97)	−7.08***
Adultification	02–10	6.79 (2.27)	6.63 (2.27)	6.99 (2.25)	2.32*
Social cohesion	03–12	6.23 (1.95)	6.34 (2.03)	6.18 (1.87)	NS
Neighborhood risk	14–60	38.51 (6.35)	38.03 (6.71)	39.03 (5.92)	2.02*

NS, not significant; *p < .05, ** p < .01, *** p < .000.

score of 17.89, with a standard deviation of 11.41 points. Youth reported a 56 percent prevalence of depressive symptoms based on a cutoff point of 16. However, using a cutoff point of 24 yielded a depressive symptom prevalence of 34 percent (table 8.1).

Mean Comparisons

Males reported a higher prevalence of depression than females. Symptoms did not vary between youth in New York and youth living in Washington, DC; however, New York youth reported significantly lower symptoms than youth in St. Louis and Philadelphia. Youth in Washington, DC, also reported significantly lower symptoms than youth in St. Louis and Philadelphia. Depressive symptoms did not differ between youth in St. Louis and Philadelphia. See table 8.2 for results

Bivariate Results

Depressive symptoms were positively related to exposure to delinquent peers, social cohesion, and neighborhood risk. Depressive symptoms were negatively related to adultification and unrelated to social cohesion (table 8.3).

TABLE 8.2 One-Way ANOVA Mean Comparisons Across Cities

VARIABLES	TOTAL SAMPLE		SAMPLE SIZE, PERCENTAGE, AND MEANS (SD)				
INDIVIDUAL FACTORS	*n*	RANGE	NEW YORK CITY *N* = 348	WASHINGTON, DC *N* =164	ST. LOUIS *N* = 238	PHILADELPHIA *N* = 149	*F*-TEST
Age	784	11–20	14.92 (2.43)	15.82 (2.46)	15.62 (2.08)	15.65 (2.45)	6.15***a,b,c
Depressive symptoms	784	0–51	15.25 (9.0)	16.15 (8.3)	18.93 (11.17)	20.45 (10.14)	11.35***b–e
Delinquent behaviors	784	14–63	20.81 (8.24)	23.09 (9.95)	19.63 (8.63)	22.61 (9.14)	6.14***d,f
Peer behavior	784	14–70	24.4 (8.30)	26.13 (10.5)	26.51 (12.5)	26.76 (10.5)	NS
Adultification	784	2–10	6.50 (2.32)	6.83 (2.36)	6.89 (2.26)	7.16 (2.19)	NS
Social cohesion	784	3–12	5.97 (1.8)	6.61 (2.0)	6.32 (2.0)	6.25 (1.8)	3.62*a
Neighborhood risk	784	15–60	39.2 (5.7)	36.4 (7.3)	38.1 (5.7)	40.9 (5.6)	11.99***c,e,f

NS, not significant; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .000$.

[a]Classes 1 and 2 are different.

[b]Classes 1 and 3 are different.

[c]Classes 1 and 4 are different.

[d]Classes 2 and 3 are different.

[e]Classes 2 and 4 are different.

[f]Classes 3 and 4 are different.

TABLE 8.3 Bivariate Correlation Coefficients for Study Variables

	1	2	3	4	5	6	7
Depressive symptoms		.075*	.410**	.383**	−.094**	.111**	.001
Age			.073*	.141**	−.023	−.052	−.042
Delinquent behavior				.515**	−.160**	.157**	−.107**
Exposure to delinquent peers					−.148**	.063	−.052
Adultification						−.038	.062
Social cohesion							−.410
Neighborhood risk							

*$p < .05$, ** $p < .01$, *** $p < .000$.

Multivariate Results

The GLM model explained 26 percent of the variance in depressive symptoms ($R^2 = .259$; $p < .000$). The results from the direct effects model indicated that depressive symptoms had positive relationships with city of residents, delinquent behavior, exposure to delinquent peers, and social cohesion.

The results from the two-way interactions model found significant interactions between adultification by delinquency, adultification by neighborhood risk, and community cohesion by delinquency on depressive symptoms. The positive relationship between delinquent behaviors and depressive symptoms was significantly weaker under high adultification. This positive relationship was also significantly weaker under high social cohesion. Neighborhood risk was inversely related to depressive symptoms under high adultification; however, neighborhood risk was unrelated to depressive symptoms under low adultification conditions. See figures 8.2–8.4 for interaction slopes.

Results from the three-way interactions indicate that all three two-way interactions (i.e., social cohesion and delinquent behavior, adultification and delinquent behavior, and adultification and neighborhood risk) depend on the city where a youth resides. Parameter estimates suggest that all significant two-way interactions mentioned above were only present among youth who lived in New York City. See table 8.4 for results.

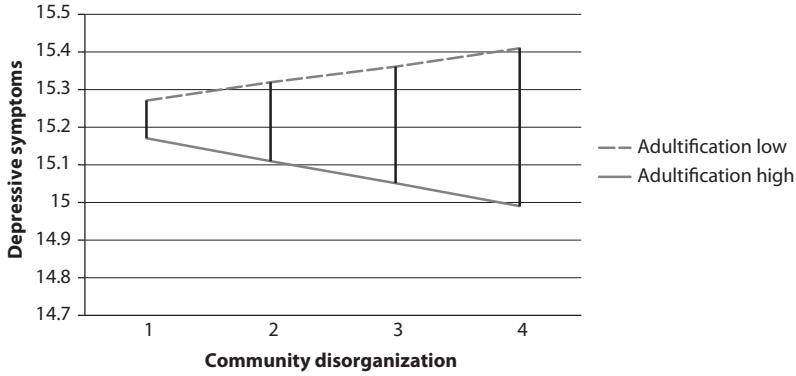

FIGURE 8.2 Community disorganization interaction slopes: adultifaction low, dashed line; adultification high, solid line.

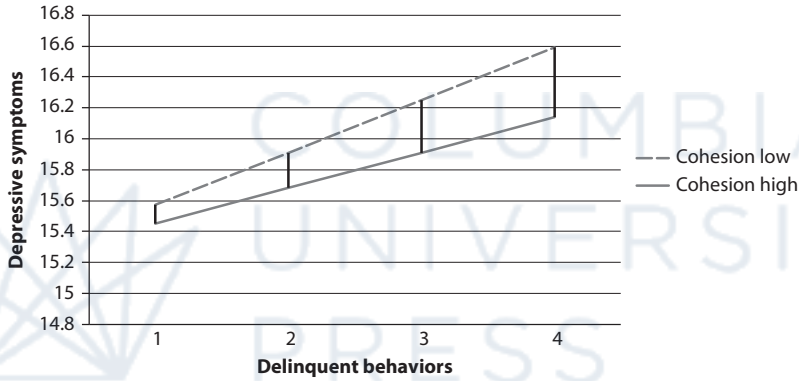

FIGURE 8.3 Delinquent behavior interaction slopes: cohesion low, dashed line; cohesion high, solid line.

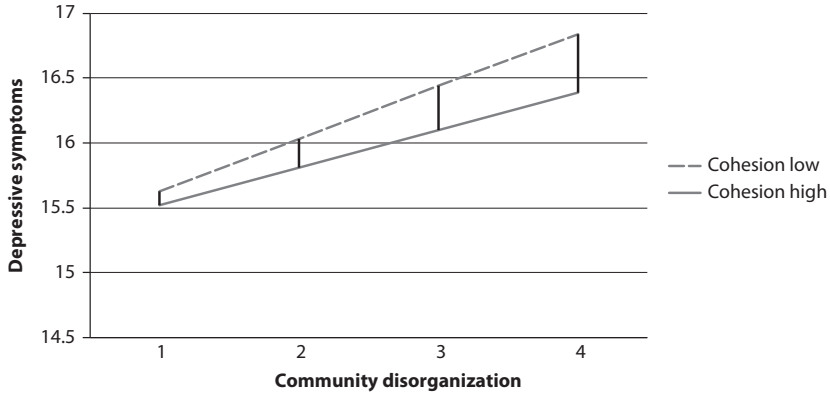

FIGURE 8.4 Community disorganization interaction slopes: cohesion low, dashed line; cohesion high, solid line.

TABLE 8.4 General Linear Model Univariate Analysis of Variance: Criterion—Depressive Symptoms (n = 785)

VARIABLES	B	SE	T	PARTIAL η^2
Direct effects				
Intercept	15.23	.785	19.40***	.330
Age	−.009	.134	NS	NS
Gender	−.727	.647	NS	NS
City	1.22	.241	5.10***	.033
Delinquent behaviors	.340	.044	7.72***	.072
Peer behavior	.206	.036	5.69***	.041
Adultification	−.159	.146	NS	NS
Neighborhood risk	.045	.056	NS	NS
Social cohesion	.404	.184	2.20*	.006
Indirect effects				
Adultification × delinquent behaviors	−.153	.043	−3.58***	.016
Adultification × peer behavior	.076	.040	NS	NS
Adultification × neighborhood risk	−.103	.044	−2.32*	.007
Social cohesion × delinquent behaviors	−.111	.039	−2.87*	.011
Social cohesion × peer behavior	.013	.039	NS	NS
Social cohesion × neighborhood risk	−.014	.036	NS	NS
Effects by place of resident				
City × adultification × delinquent behaviors	.050	.016	3.03**	.012
City × adultification × peer behavior	−.017	.015	NS	NS
City × adultification × neighborhood risk	.041	.017	2.43*	.008
City × social cohesion × delinquent behaviors	.032	.014	2.21*	.006
City × social cohesion × peer behavior	−.009	.014	NS	NS
City × social cohesion × neighborhood risk	.010	.013	NS	NS
R^2 = .259				

NS, not significant; *p < .05, ** p < .01, *** p < .000.

DISCUSSION

African American adolescents living in urban public housing face many challenges. Their living environments are often marked by dilapidation and disorganization, as well as a high prevalence of violence and other crimes. Despite their challenging environments, many African American youth avoid life-compromising situations and become well-functioning citizens (Furstenberg et al. 1999). Indeed, it must take enormous individual and community adaptations to maintain functional competences in environments where risk factors do not have a discrete onset or remittance. Identifying factors that buffer the negative effects of living in harsh urban environments is critical to the development of preventative interventions targeting African American youth living in urban public housing. Using the integrated ecological perspective outlined in chapter 3, this chapter examined how constructs (e.g., adultification and community cohesion) salient in urban African American communities buffer the negative effects of delinquent behavior, exposure to deviant peers, and exposure to neighborhood hazard on depressive symptoms among African American youth living in urban public housing.

As predicted by our integrated model, delinquency, exposure to neighborhood hazard, and exposure to delinquent peers were associated with adverse emotionality (e.g., increased depressive symptoms). These findings were consistent with previous research (Aneshensel & Sucoff 1996; Mazza & Reynolds 1999; Morenoff & Lynch 2004; Schwab-Stone et al., 1999). Unlike as predicted, youth who played a greater role in household responsibility (i.e., adultification) did not report a higher sense of emotional well-being (i.e., decreased depressive symptoms). However, adultification did emerge as a protective factor in the face of neighborhood risk and delinquent behaviors. Although adultification has been identified as a protective factor in the qualitative literature (Jarrett 2003), this finding (i.e., the protective factors of adultification) is unique to quantitative research. Unlike predicted, community cohesion negatively influenced adolescents' sense of emotional well-being. This finding is in consistent with previous research that found more cohesive communities to be associated with improved adolescent emotionality (Garbarino & Kostelny 1992; Sandler et al. 1989). It is important to note that social cohesion emerged in the presence of threat/risk. These observations are consistent with resiliency and protective factor models.

Unlike expected, adultification did not play a dual role in a youth's life. On the one hand, it was not related to depression. On the other hand, adultification is a protective factor, such that assuming a high degree of adult responsibilities was indirectly related to increased emotional well-being.

Site variations were also noted in depressive symptoms, suggesting that depressive symptoms were directly related to the city where a youth lives. More specifically, youth in Washington, DC, reported significantly lower symptoms than youth in St. Louis and Philadelphia. Depressive symptoms, however, did not differ between youth in St. Louis and Philadelphia.

We believe that the findings reported in this study have not been previously reported in quantitative research. We further believe that these findings move the literature beyond mainstream approaches and may help to identify natural adaptations, with great potential to promote resilience within urban African American neighborhoods.

Limitations

Although this study has important implications to practice and research, its limitations must be acknowledged. First, because of the difficulties in gaining access to this population, the study used nonprobability sampling techniques (e.g., convenience and snowball sampling). These approaches ensured adequate sample size; however, they increased the chances of threats to external validity, compromising generalizability. Second, the cross-sectional design prevents us from establishing causality. Third, other factors, such as antisocial behavior and parental influences, may affect an adolescent's depressive symptoms (e.g., Nebbitt & Lombe 2008). Fourth, the construct of adultification is crudely operationalized. The concept may encompass other dimensions of a youth's life beyond simply helping parents with siblings. Finally, conclusions are based on self-reported data obtained from African American youth in urban public housing in the Midwest, Mid-Atlantic, and Northeastern regions. Generalizing these findings to youth in public housing from other regions should be done with caution.

Implications

Several implications to guide policy decisions and develop interventions to support positive adaptations among youth in urban environments emerge

from this study. A primary focus of policy could be addressing the systemic/structural disadvantages that characterize urban neighborhoods and shape the experience of African American youth in these environments. Social workers have the mandate to take a proactive role in advocating for the transformation of the socioeconomic conditions prevailing in these neighborhoods. A fuller discussion of the implications of research, service delivery, and policy is discussed in the next section of this book.

PART 3

Implications and Applications

9

Implications to Practice and Service Use

▸ *THEDA ROSE, MICHAEL LINDSEY, AND VON E. NEBBITT*

ADOLESCENT DEVELOPMENT ENCOMPASSES MULTIPLE AND sometimes interacting personal, social, economic, cultural, and environmental factors (Bronfenbrenner 1979; Compas & Millstein 1993; Knopf, Park, & Mulye 2008; Rowling 2006; World Health Organization 2004). Bronfenbrenner (1979) underscored the important role of an adolescent's environment in understanding their development. Indeed, the surroundings within which children or adolescents develop can serve to either promote or inhibit favorable and negative outcomes.

THE URBAN ENVIRONMENT, MENTAL HEALTH NEEDS, AND MENTAL HEALTH SERVICE USE

The urban environment may play a unique and at times critical role in shaping minority adolescent development. Researchers have surmised, for example, that the developmental outcomes of African American adolescents may be indubitably affected by the distinctive experience of the urban context, such as the public housing neighborhood, and that this experience is unshared by nonminority youth (Coll et al. 1996; Jarrett 2003; Nebbitt & Lombe 2007). These suppositions undergird the importance of exploring the relationship between environmental factors and developmental outcomes for urban minority youth.

Although African American adolescents on the whole navigate the developmental stages of adolescence successfully, they may be at higher

risk for adverse behavioral health outcomes, such as depression, compared to other racial/ethnic minority youth (Roberts, Roberts, & Chen 1997; U.S. Department of Health and Human Services [USDHHS] 2001). Additionally, negative characteristics of the urban environment, such as community violence, poverty, and deviant peer groups, may further contribute to adverse outcomes for African American adolescents, particularly those living in public housing settings (Garbarino 1992; Jenkins & Bell 1997). Exposure to community violence, for example, is related to antisocial behavior, such as the use of violence (DuRant et al. 2000) and increased aggressive behavior (Gorman-Smith, Henry, & Tolan 2004). Furthermore, exposure to delinquent peers is related to greater participation in delinquent behaviors (Nebbitt, Lombe, & Williams 2008) and depressive symptoms (Nebbitt & Lombe 2007) for urban youth living in public housing settings.

Although interventions exist for the treatment of mental health issues such as depression, utilization of these services remains low among African American adolescents (Substance Abuse and Mental Health Services Administration 2009). Generally, 80 percent of adolescents needing mental health treatments are not accessing suitable mental health treatments (National Advisory Mental Health Council 1990; USDHHS 1999). Mental health service utilization is, however, ostensibly lower among ethnic minority youth compared to white youth (USDHHS 2001), especially for African American children and adolescents (Flisher et al. 1997). Additionally, children in low-income, resource-poor urban communities may have greater unmet needs (Griffin, Cicchetti, & Leaf 1993), terminate treatment prematurely (Kazdin 1993), or lack adequate insurance to access treatment (Lindsey et al. 2010).

The purpose of this chapter is to examine mental health interventions and services that might be responsive to the unique mental health challenges faced by African American adolescents living in public housing settings. We outline current empirical research on this vulnerable population. Pragmatic solutions are offered, which center on how mental health interventions and services might be targeted at the family, community, and school levels to stymie the current of context-induced, untreated mental health needs for African American adolescents living in public housing settings.

THE DISTINCTIVENESS OF ADOLESCENT DEVELOPMENT IN URBAN PUBLIC HOUSING

Chapter 3 identified a vital need in the research literature for theories that help to understand the processes influencing child and adolescent development within the urban environmental context, specifically within urban public housing settings. In particular, chapter 3 elucidated factors, including protective factors, that are potentially related to differences in developmental outcomes for youth living in public housing. The chapter examined factors that may prevent negative outcomes, as well as factors that promote positive ones.

The Integrated Model of Adolescent Development in Public Housing Neighborhoods is presented in depth in chapter 3. Generally, it purports that distal factors, such as residential segregation, mediated through processes such as discrimination and isolation, potentially influence adolescent developmental outcomes. Additionally, proximal factors and processes including promotive (e.g., fictive kinship networks) and inhibiting (e.g., community violence) aspects of the public housing environment may have direct and at times interacting effects on both positive and negative youth adaptations and development. Understanding the influence of both distal and proximal factors on developmental outcomes of youth in public housing is imperative to the development of prevention and treatment interventions consonant with the needs and experiences of this population.

KEY FINDINGS

The findings from the studies discussed in this book support existing research and provide new knowledge about the influence of developmental factors and health-related outcomes inherent to the public housing setting for African American adolescents. Sections of the Integrated Model of Adolescent Development in Public Housing Neighborhoods in chapter 3 were tested through empirical studies in this volume, which examined the impact of selected promoting and inhibiting aspects of the public housing neighborhood on both internalizing symptoms and externalizing behaviors among African American adolescents in this setting. Specifically, researchers examined individual, family, community, and neighborhood

risk and protective factors as direct and/or indirect influences on depression, substance use, and antisocial, delinquent, and health-risk behaviors among African American youth in public housing. The studies also examined factors such as adultification, community cohesion, and social context as possible moderators of the explored relationships. Both adultification and community cohesion were viewed in this volume as positive adjustments made by adolescents to enduring life in harsh urban environments (chapter 8).

The authors found some support for the suppositions of the model. In chapter 5, the promoting aspects of the public housing environment, such as fictive kin (defined as adults considered close but unrelated) and maternal encouragement, were found to positively influence adolescent attitudes and beliefs, which together function as a protective factor against negative youth behaviors and lower emotional well-being in adolescents. As predicted, inhibiting aspects of the public housing environment, such as community violence, delinquent peer affiliation, and perceptions of neighborhood disorder, were directly and indirectly related to depressive symptoms and engagement in health-risk behaviors (chapters 6–8). Additionally, adultification was directly related to less depressive symptoms, lower susceptibility to neighborhood risk, and fewer exposure to deviant peers (chapter 8). Furthermore, community cohesion emerged as a potential protective influence mitigating the impact of community and neighborhood risk factors on depression and substance use in this population (chapters 6 and 8).

Although the primary focus of the research was not to explore gender differences in outcomes, the presence of externalizing and internalizing symptoms was also found to vary, at times, by gender. Chapter 6, for example, found greater prevalence of posttraumatic stress disorder (PTSD) in females, while males exhibited higher substance use and delinquent behavior, as well as experienced greater exposure to household conflict (chapters 6–8).

Generally, the empirical studies support the postulations of the integrated model that individual, family, community, and neighborhood factors either directly or indirectly influence both positive and negative developmental outcomes in adolescents. The research supports the importance of examining factors that promote well-being and protect against negative behaviors within the population of African American adolescents

residing in public housing. The research also evinced that community cohesion served as a critical protective function between neighborhood risk factors and both substance use and depression. The findings also highlighted differences in certain behaviors and symptoms based on gender. Taken together, the results suggest several factors that could inform the development or implementation of interventions targeted to this group.

ADOLESCENT PREVENTION INTERVENTIONS

Approaches to promote healthy development, reduce risk, and allay youth dysfunction can incorporate both prevention and treatment interventions. Weisz et al. (2005) proposed a comprehensive prevention and treatment intervention model for youth, incorporating a continuum of approaches that range from healthy promotion and positive development to treatment. The model places youth at the center, surrounded by family, community, and culture, underscoring the importance of youth strengths, relevant social relationships, and the influence of cultural and ethnic differences on the positive development of youth. The model also includes various interventions and settings within which the interventions can be implemented. The authors suggested that each intervention strategy is an important but insufficient method of addressing the extent of youth mental health needs (Weisz et al. 2005).

Coll et al. (1996) emphasized the importance of understanding the ecological context within which minority children develop as crucial to the ability to effectively intervene in their lives. Based on the theoretical model presented in this book, interventions that support promoting positive aspects of the public housing environment (e.g., maternal encouragement) and reduce the risk of the inhibiting aspects of the environment (e.g., community violence) seem paramount to the healthy development of the adolescents in this setting. The impact of both risk and protective factors, such as perceptions of neighborhood, delinquent peers, and fictive kin, were substantiated through the empirical studies in this volume. Therefore, preventive interventions seem relevant to explore as a part of the comprehensive approach to addressing the needs of this population.

Grounded in the developmental perspective, a central idea of prevention is that early intervention (proximal) will prevent a later (distal) negative outcome (Kellam, Koretz, & Moscicki 1999). Generally, prevention

research focuses on the exploration of the precursors of health or disease that influence the developmental process. It also highlights a risk and protective framework such that protective mechanisms interact with risk factors to mitigate the effect of the risk when present (Coie et al. 1993; Kellam, Koretz, & Moscicki 1999; Luster, Bates, & Johnson 2006). Risk factors can be broadly defined as circumstances, attributes, and events that increase the probability of negative outcomes (Carbonell et al. 2002). Protective factors can be defined as factors, both internal and external, that potentially guard against or alleviate risk (Kirby & Fraser 1997). Subsequently, prevention interventions are geared towards mitigating risk factors and promoting the development of protective factors, thereby reducing incidence of maladjustment and promoting optimal functioning in individuals (Coie et al. 1993; Gordon 1983; Kazdin 1993; Kellam, Koretz, & Moscicki 1999). Garmezy (1985) identified three general classes of factors that can be considered protective: factors inherent to individuals, factors that create a supportive family setting, and factors outside of the individual and family that support the positive development of the child. These factors in operation may serve to protect an individual from the development of a problem, diminish or mitigate the impact of a risk factor, and/or strengthen an individual's ability to cope in the presence of a risk (Carbonell et al. 2002). Protective factors have also been highlighted as one aspect of promoting resilience (Rutter 2006) that potentially have a cumulative or combined impact on outcomes (Kirby & Fraser 1997).

A FOCUS FOR INTERVENTIONS

Various aspects of the promotive and inhibiting aspects of the public housing environment were explored by the authors in this text in relation to developmental outcomes in adolescents. Multiple factors were found to impact a particular problem behavior. The next sections highlight key factors to consider in the implementation of interventions targeted to youth in public housing based on some of the major findings of the research in this volume.

Promotive Aspects of the Public Housing Environment

Results from the empirical research in this text support the facilitation of interventions that focus on promoting positive family- and community-level

factors in an effort to foster positive adolescent development and protect against risk factors inherent to the public housing setting. Chapter 5 reported, for example, that family factors influence adolescents' attitudes towards deviance and efficacious beliefs, which, in turn, protect against negative youth behaviors and lower emotional well-being. Family has been indicated as the primary socialization agent and a key form of social capital for children and adolescents. Additionally, families in low-income settings, such as public housing, may leverage relationships with extended family, including fictive kin, in an effort to develop and strengthen social support networks (chapter 3). Subsequently, adolescents in these settings may benefit from the tangible and intangible resources and emotional support provided by these networks. Within a prevention framework, the findings would support the implementation of interventions that target the family, school, and community environments within which the adolescent lives. Specifically, both individual and group interventions could incorporate strategies to work with the adolescent's family to foster maternal encouragement and promote positive relationships with adults considered close but unrelated (fictive kin) in an effort to reduce antisocial behavior and engagement with delinquent peers and promote better emotional well-being (e.g., less depression).

Additionally, chapters 6 and 8 found that community cohesion served a protective function, reducing the effect of inhibiting aspects of the public housing environment on both substance use and depression, respectively. In chapter 6, community cohesion was conceptualized as supportive relationships outside of an adolescent's primary home environment (Gutman, Sameroff, & Eccles 2002). The literature on effective programs for adolescents showed that facilitating positive relationships with peers, family, and other adults were beneficial to youth and helped to allay engagement in risk behavior (Nation et al. 2003). The current findings suggest that interventions designed to produce better outcomes in this population would benefit from the inclusion of opportunities for youth to develop positive relationships with others in school and other community settings as a protective mechanism against negative developmental outcomes.

In chapter 8, adultification, conceptualized as the process by which adolescents adopt behavior and roles that are normally adult (Jarrett 2003), was found to be related to fewer depressive symptoms among adolescents in the public housing environment. This unique finding suggests the significance

of place, or neighborhood, and the consideration of youths' adaptations to their particular environment in the development of interventions that are relevant to this population. Individual- or group-level interventions, for example, designed to address or protect against negative outcomes in this population, could consider the role(s) that an adolescent plays in the family or household and how those roles may have a positive impact on the adolescent's emotional well-being.

Inhibiting Aspects of the Public Housing Environment

The research findings from this volume also identify inhibiting aspects of the public housing environment that have a detrimental effect on developmental outcomes in adolescents' lives. These factors should also be considered in the development of interventions targeted to address negative developmental outcomes in this group. Community violence, domestic violence, exposure to delinquent peers, delinquent behavior, symptoms of PTSD, depressive symptoms, and neighborhood disorder, for example, were directly and indirectly related to greater substance use (chapters 6 and 7). Chapter 8 found that delinquent behavior, exposure to deviant peers, and neighborhood risk were all positively related to depression. Individual or group-level interventions designed to address depression and/or substance among this population of urban youth can incorporate multiple components, such as developing better decision-making skills, dealing with violence, and cognitive behavioral therapy to reduce the risk of these various factors on negative developmental outcomes.

Additionally, interventions can target the individual problem behavior, as well as the multiple environmental contexts of the adolescent. Chapter 7 reported that adolescent perceptions of disorder in their neighborhoods influenced high-risk sexual behaviors. Individual- and group-level interventions that incorporate strategies to help adolescents manage their perceptions of neighborhood disorder and that target the reduction of neighborhood risk may also, in turn, affect a decrease in the high-risk behavior. Additionally, previous research has suggested that substance abuse treatment programs incorporate the exploration of risk and protective factors in various settings, such as the family, peer group, and school (Hawkins, Catalano, & Miller, 1992). Additionally, Komro et al. (2008) and Diamond et al. (2009) described interventions, adapted for use with

an urban youth population, to impact factors associated with alcohol and drug use. The interventions targeted change in factors associated with substance use within multiple environmental contexts of the adolescent, including school, home, peers, and community. Similarly, because the findings in this book found to impact negative youth developmental outcomes traverse various environmental contexts (e.g., domestic violence, neighborhood disorder), interventions should be explored that are multilevel, addressing family, school, peer, and community settings. Generally, the research findings regarding both the promotive and inhibitive aspects of the housing environment contribute to the design of interventions that target the individual, family, peer, and community levels.

CONCLUSION

The literature suggests that adolescent development takes place within the transactions that occur between the adolescent and his or her environment (e.g., Coll et al. 1996). The uniqueness of an adolescent's experience within the public housing environment can significantly impact developmental outcomes in this group. The research in this volume evinced various individual, family, community, and neighborhood level factors that either directly or indirectly influence both positive and negative developmental outcomes in adolescents and have implications for the development of interventions that promote well-being and protect against negative behaviors within the population of African American adolescents residing in public housing. The distinctive culture of the urban environment, along with the unique experiences of minority adolescents within that environment, also support the implementation of interventions that consider the protective influence of family and community as well as the possible deleterious impact of place and neighborhood. These interventions can be facilitated at multiple levels (e.g., family, school) to target the various social contexts of the adolescent, with the ultimate goal of promoting better mental and behavioral health outcomes for adolescents in public housing neighborhoods.

10

A New Direction for Public Housing

THE IMPLICATIONS FOR ADOLESCENT WELL-BEING

▸ CAROL S. COLLARD AND VON E. NEBBITT

INTRODUCTION

AFRICAN AMERICAN ADOLESCENTS LIVING IN urban public housing are exposed to positive and negative influences from their immediate community. Many youth experience favorable outcomes despite living in public housing; they complete their education and go on to lead productive lives. The reasons are varied and not definitive, but there is commonality in the association of individual resiliency, familial support, and community cohesion with more favorable youth outcomes. As chapters 3 and 8 demonstrate, community cohesion plays an important role in influencing a youth's positive adaptation.

However, the current conditions of many public housing developments and the surrounding environs often do not foster strong community cohesion. Hay et al. (2007) examined the correlation between delinquent behavior and the level of community poverty; they observed that the lower the collective socioeconomic status of a community, the more likely a child is to engage in deviant behavior. Although efforts to positively affect individual behavior and attitudes are essential to appropriate youth development, it is folly to not recognize the importance of place as an influencer of behavior.

This chapter examines the national decline of public housing and current policies and programs designed to revitalize it. Despite their flaws, current public housing policy initiatives suggest significantly improved conditions for families. The favorable impact on quality of life for public

housing residents in turn indicates the likelihood of a favorable effect on the level of community cohesion.

THE DECLINE OF PUBLIC HOUSING

Initially conceived in the 1930s and 1940s to rid the urban landscape of its slums, public housing was intended as an interim solution to help families stabilize and transition out of their impoverished circumstances. It is painfully ironic then that the perception and use of this vital resource would later morph into a dumping ground for the disenfranchised. Over the next 50 years, political and social forces skewed by inequities of race and class have distorted the mission of public housing, making it the primary resource for housing the chronically poor and marginalized.

Under the guise of urban renewal, public housing proved to be a useful vehicle to perpetuate segregation and isolate certain neighborhoods according to race and socioeconomic status. Often situated in areas removed from major employment centers, public housing developments grew increasingly undesirable as a housing option for those who could opt to not live there. The tenant mix became less economically diverse and largely populated by households headed by single mothers who were marginally educated, chronically unemployed, and welfare-dependent (Bloom 2008; Turner 2009). Furthermore, because many of the local housing authorities grappled with reduced funding, public housing was further crippled by inadequate management practices and absent security, which created unfettered opportunities for illegal drug trafficking and violent criminal activity (Katz 2009; Turner 2009; Vale 2002). This characterization is particularly true in major urban areas, where an estimated two-thirds of all public housing residents are located (Coulibaly 1998; Turner 2009; Vale 2002). Too often, the inevitable outcomes are environments that are as bad—and in some instances, worse—than the slums they sought to eliminate. According to Vale (2002:8), "Once public housing became reconceptualized as a publicly funded resource for coping with the needs of the most desperate city-dwellers, public neighborhoods inevitably became treated as storage facilities rather than as communities."

Along with a declining economy, the 1980s also launched a period of significant increases in drug use and crime. This marked shift is believed to be largely connected to the introduction of crack cocaine to the inner

cities (Katz 2009; Turner 2009; Vale 2002). Witnessing the change, the remaining households that could afford to escape to the suburbs or to better neighborhoods quickly did so. For those remaining, the rapid rise in drug and gang activity coupled with inadequate municipal solutions made impoverished neighborhoods, particularly public housing communities, a haven for the criminal element and a trap for those with no safer place to go. With few alternatives, youngsters found the neighborhood drug lords and other criminal elements to be deceptively tempting role models.

THE SIGNIFICANCE OF PLACE

Critical to human development over the life course is the ongoing connection to place. The place, or the physical environments, we inhabit have a role in affecting behavior and well-being (Bell et al. 1996; Kahneman, Diener, & Schwarz 1999; Proshansky, Fabian, & Kaminoff 1995). A critical subcomponent of self-identity is place identity (Proshansky, Fabian, & Kaminoff 1995). From infancy to adolescence, the earliest environmental influences—home, school, and neighborhood—are where some of the most significant social roles are learned. These are the places where an individual experiences the beginning of efficacy and develops a sense of mastery to use, change, and derive satisfaction from his or her environment (Proshansky, Fabian, & Kaminoff 1995).

The positive and negative experiences attendant to each place informs the individual and shapes his or her environmental understanding. The individual learns what the expectations are and how to behave for each setting. Importantly, the person learns how and whether he or she is valued from environmentally transmitted cues. That knowledge, in turn, shapes self-perception and efficacy in those and other settings.

The physical design of most public housing developments, although initially intended to symbolize a new and better neighborhood, eventually devolved into stigmatizing and oppressive places to inhabit (Coulibaly 1998; Vale 2002). Many were massive, high-rise apartment complexes that were poorly constructed and maintained. Commonly known as "the projects," they were often sterile environments with minimal architectural features or amenities (Turner 2009; Vale 2002). Because most public housing developments are also located in the poorest, most isolated neighborhoods, they are often considered the focal point of the area's crime and blight.

Studies have shown that the quality and location of our homes and neighborhoods can often impact how we function and how we are regarded by society (Dreier, Mollenkopf, & Swanstrom 2004). Annison (2000:251) asserted that the "creation and experience of home is an important contributor to a person's humanity and their positive social perception by others." Dreier, Mollenkopf, & Swanstrom (2004:27) affirmed, "Where we live has a powerful effect on the choices we have and our capacity to achieve a high quality of life." Stating that you live in "the projects" often automatically conveys a certain meaning or stereotypical perception about your life experience, without even having to say in which project you live (Vale 2002). The physical and social space inhabitants occupy in "the projects" can both perpetuate and reinforce perceptions of inferiority and collective dysfunction. Tragically, in far too many instances, those negative perceptions are embraced by society and internalized by its inhabitants. Given this context, it is not surprising that findings indicate that the collective efficacy of a neighborhood is thus compromised and the cohesion of the community suffers as the concentration of poverty in a neighborhood rises (Sampson, Morenoff, & Gannon-Rowley 2002).

ADOLESCENT WELL-BEING AND ITS CONNECTION TO PLACE

According to Coll et al. (1996), children and adolescents living in neighborhoods like public housing are simultaneously exposed to inhibiting and promotive influences from their immediate community. Nevertheless, many of these youth still experience favorable outcomes (chapters 5 and 8). They complete their education and go on to lead productive lives. The reasons are varied and not definitive. However, based on the studies featured in this text, there is commonality in the association of individual efficacy, familial support, and community cohesion with more favorable youth outcomes.

Chapter 6 discusses the concept of community cohesion, which is understood to be the supportive relationships beyond a youth's immediate home environment (Gutman, Sameroff, & Eccles 2002). Social support is generally recognized as the network of peers and caring adults within a youth's community. Its quality or effectiveness is evaluated on the basis of people's perceptions of how community members relate to each other (Rountree & Warner 1999; Garbarino & Kostelny 1992). As asserted in

chapter 3, community cohesion plays an important role in influencing a youth's positive adaptation. Other findings indicate that higher community cohesion is associated with higher generalized self-efficacy (Nebbitt 2009), which in turn is associated with lower alcohol and other drug use in adolescents. Chapter 8 also cites community cohesion as a protective factor against adverse mental health outcomes for adolescents exposed to the risk factors of deviant peers and perceived neighborhood risk.

Given the grim and potentially dangerous environments that often characterize impoverished urban neighborhoods and affect community cohesion, there is legitimate concern regarding the influence of place on adolescent well-being. Social disorganization theory suggests that people living in low-income situations experience stress that is a result of lack of social control (Hay et al. 2007). The lack of control results in maladaptive coping mechanisms that manifest themselves in delinquent behavior.

Galster and Santiago (2006) found that children and youth living in inner-city neighborhoods characterized by high levels of poverty and social disorganization have poorer health outcomes, lower levels of academic achievement, fewer employment opportunities, heightened vulnerability to gang recruitment, and greater exposure to violence relative to similar children living in more advantaged neighborhoods. The child's exposure to violence, in turn, heightens the likelihood of their own involvement in violent situations (Corcoran & Chaudry 1997; Galster & Santiago 2006; Okundaye 1999; Sampson, Morenoff, & Gannon-Rowley 2002).

There are hopeful indicators, however (as reported in chapters 5–8), which suggest that changes in public housing policy may contribute to heightened community cohesion, yielding positive outcomes for the young people in public housing. Chapter 7 cites research that examines the effects of community cohesion on psychological (internalizing) functioning in urban youth and youth's externalizing behavior (e.g., substance abuse). The chapter also reported findings that the relationship between exposure to delinquent peers and substance abuse is moderated by increases in community cohesion. This observation may have important implications for youth in urban public housing, as chapter 7 cited other scholars (Aneshensel & Sucoff 1996; Zimmerman et al. 2000) who have made similar observations.

It should be noted that while protective factors include family and social support, the efficacy of these factors is also susceptible to the influences of place. Parents struggling to cope with their own environmental stressors

may experience challenges that could negatively affect their roles as parents and heads of households (Corcoran & Chaudry 1997; Gallagher 1993; Galster & Santiago 2006). Along with improved public housing conditions, community cohesion will be strengthened when these young people can be assured access to a competitive public education and adequate community resources. That is why we must look critically at public housing and their environs as a resource for increasing the likelihood of positive youth outcomes.

A REINVENTION OF PUBLIC HOUSING

Housing policymakers have returned to public housing's original mission to improve housing conditions and foster upward mobility for low-income citizens. There is a chastened recognition that the concentration of poverty without opportunity for escape is disastrous not only for those trapped in the cycle but also for the society at large. Also clear is the need for more to be provided than just housing. In addition to creating quality, affordable dwellings, emphasis now is on creating or facilitating the kinds of environments that allow diversity of race and class, provide vital community services and supports, and are likely to foster heightened community cohesion.

Current public housing initiatives developed by the Department of Housing and Urban Development include HOPE VI, Moving to Opportunity, and Choice Neighborhoods Initiative. Integral to public housing's transformation and goal of deconcentrating poverty (Katz 2009) is increased availability of Housing Choice vouchers (also known as Section 8 vouchers), which ideally promotes choice among low-income recipients as well as access to and integration of less impoverished neighborhoods.

HOPE VI

The earliest example of the repositioning of public housing was Techwood Homes, located in Atlanta, Georgia. Built in 1936, Techwood Homes was the nation's first public housing development. Sixty years later, it was also distinguished as being among the first to be demolished to make way for a reinvention of public housing that uses public–private partnerships to own and manage its developments (Atlanta Housing Authority 2010). Using a federal program called Housing Opportunities for People Everywhere

(HOPE VI), the Atlanta Housing Authority partnered with a private developer to create Centennial Place, as it is now known. Master-planned as a mixed-income community, Centennial Place integrates public housing with market-rate apartments. Situated in the shadow of Georgia Tech University, the Centennial Place plan also included development of additional upscale owner-occupied housing, a charter school, a new YMCA, and retail centers.

Since the inception of the HOPE VI program in 1992, an estimated 86,000 of the 1.3 million public housing units nationwide have been identified as severely distressed and targeted for demolition. The plan is to eventually replace them all with newly constructed low-rise and townhome developments (Katz 2009).

Proponents point to the contributions that HOPE VI projects have made in revitalizing neighborhoods, of the heightened perception of safety among residents, and of the furtherance of the deconcentration of poverty in urban areas. Studies also point to improved outcomes regarding school quality and access to community resources (Turner 2010). Most of the criticism of HOPE VI centers around three concerns:

1. Noncompliance has occurred regarding the unit-for-unit replacement policy. Because there already exists a shortage of affordable housing, a failure to allot the same number of public housing units in the redeveloped sites reduces the inventory of affordable housing in that jurisdiction (Crowley 2009; Marquis & Ghosh 2008).
2. Strict eligibility guidelines do not guarantee housing for every displaced household. Not all public housing residents are eligible to apply to return to the newly constructed development, and not all receive housing subsidies to relocate (Crowley 2009; Marquis & Ghosh 2008).
3. Public housing authorities and developers fail to take into account the importance of loss and disconnection from social and communities ties that displaced residents experience postrelocation (Crowley 2009; Vale 2002).

Moving to Opportunity

The Moving to Opportunity (MTO) demonstration program emphasizes the benefits to residents of exercising personal choice to move to

less impoverished neighborhoods. Modeled after the Gautreaux initiative, MTO asserts that families would realize improved life circumstance and better outcomes if they could have access to better schools and more social and community resources (Katz 2009; Turner 2009). The program is currently based in five public housing authorities (Baltimore, Boston, Chicago, Los Angeles, and New York City). Public housing residents are issued Housing Choice vouchers and are counseled to locate housing in less impoverished neighborhoods.

Having a housing voucher is no guarantee of upward mobility (Turner 2009). By and large, although most African American families do use the vouchers to move out of public housing, they often ended up in nearby neighborhoods with high concentrations of poverty in order to remain close to family and friends. However, follow-up studies tracking outcomes for former public housing residents do indicate that most are better off, despite still experiencing poverty (Turner 2009). Turner (2009) reported that former residents acknowledge improvement in housing and neighborhood quality, reduced incidence of violent crime, and better schools for their children.

Rosenbaum, Reynolds, and DeLuca (2002) conducted a qualitative study on participants of the Gautreaux program, which evaluated the relationship between housing and community and individual efficacy. The "culture of poverty" theory was contrasted with the "geography of opportunity" theory in determining if low-income residents from one of Chicago's public housing developments would continue to demonstrate low efficacy even after moving to a more affluent neighborhood. The results of the study showed that the change in environment influenced efficacy. The "behaviours seen in 'housing project residents' do not indicate inherent capabilities. These behaviours are not seen in former 'housing project residents' after they move if the random assignment placed them in middle-class suburbs" (81).

Similarly, a longitudinal study (Boston 2005) conducted in the metropolitan Atlanta area evaluated the outcomes of public housing residents moving to mixed-income settings in suburban areas surrounding Atlanta's city limits. Residents were followed over a 7-year period. The study reported that residents who relocated experienced higher rates of employment, better health conditions, better schools for their children, and better housing conditions. Boston reported: "Focus group and survey results

from resident tracking studies in Atlanta indicate that the change in location played a major role in improving households' motivations" (401). Boston also cited another study of public housing residents that was conducted by the Georgia State School of Social Work. He reported that their findings also indicated that most participants acknowledged experiencing some aspect of personal growth or development that they associated with relocation.

Critics acknowledge that while there are significant benefits to the program, it is important to recognize that the families in transition often experience a sense of loss when leaving their public housing community (Clampet-Lundquist 2010; Turner 2009, 2010), which may lead to a lowered sense of environmental mastery from the disconnection with the familiar, both of social ties and place.

Choice Neighborhood Initiative

Launched by the Obama administration, the Choice Neighborhoods Initiative is the newest affordable housing initiative designed to improve the plight of distressed neighborhoods and continue the effort to deconcentrate poverty (Turner 2010). The initiative seeks not to permanently relocate families but instead to leverage public–private partnerships to revitalize the existing neighborhoods. Along with improved housing conditions, the effort will focus on providing coveted community amenities, particularly on improving schools and related services that affect child well-being.

As noted in chapter 7, given the role that community cohesion plays in influencing a youth's positive adaptation, social work scholars and practitioners must reexamine prevailing perceptions of such communities. Indeed, despite their often deplorable conditions, such communities have both the resources and potential to solve their own problems if they are empowered to do so.

The Choice Neighborhoods Initiative may offer some appeal to detractors of both the HOPE VI and MTO programs because the emphasis is on improving conditions where low-income households currently live, offering the services and supports that would make these neighborhoods attractive to other, more economically self-sufficient families.

INFLUENCE OF ECOLOGICAL TRANSITION ON WELL-BEING

Rosenbaum, Reynolds, and DeLuca (2002:81) cited compelling evidence on how the ecological transition of changing neighborhoods can positively affect efficacy and subsequent behaviors among low-income households:

> Unlike the culture of poverty model espoused by some researchers, it has been seen that the very same individuals who report having very little efficacy over their life experiences in housing projects subsequently show considerable efficacy in middle-class suburbs. Places matter. The attributes of neighbourhoods, and the experiences provided by neighbourhoods have profound effects on people's capabilities and their ideas about what they can accomplish.

CONCLUSION

Although promising, the changes underway regarding public housing policy currently affect a very small percentage of all public housing units. Furthermore, ongoing prejudice and discrimination in urban and suburban communities will limit the expanded use of Housing Choice vouchers in more affluent communities. The expanded scope of programs and policies expected to be implemented under the Obama administration are encouraging. There appears to be recognition that while current conditions in public housing are not conducive to healthy development of our youth, there is value in investing and revitalizing existing communities. Is it realistic, however, to expect that the disparities of class and race will not continue to influence future policy decisions, posing prolonged discrimination and disadvantages for the poor? The research shows promise, but it will prove to be a daunting challenge.

Despite their flaws, the current trends in public housing policy point to improved housing and community conditions for families, which in turn suggest a direct and favorable effect on the level of community cohesion. Based on the findings reported in this volume, community cohesion appears to be integral to nurturing individual efficacy and to mitigating the negative influences from the environment among adolescents. The neighborhood context does matter. The neighborhood in

which a home is located matters because the impact of neighborhood on well-being is undeniable. We remain hopeful that, in the long term, the expectations of success and well-being for adolescents living in public housing will not be determined by their address but by their character and abilities.

11

Summary and Conclusion

THE CHALLENGES OF PUBLIC HOUSING ENVIRONMENTS FOR YOUTH

▸ JAMES HERBERT WILLIAMS, VON E. NEBBITT, CHRISTOPHER A. VEEH, AND DAVID B. MILLER

RESEARCH USUALLY STARTS WITH AN intention to investigate a pressing social issue more empirically and systematically. This book examines the environmental context and developmental trajectory of youth living in public housing. The authors have summarized the current literature and provided a conceptualization of a theoretical model to advance our understanding of the life course of these youth. In addition to putting forth a theoretical model for a better understanding of the challenges of public housing neighborhoods, the authors empirically tested various hypotheses of the theoretical model. Research on youth in public housing has been primarily limited to using a deficit model to understand behavioral outcomes (Barrow et al. 2007; Ireland, Thornberry, & Loeber 2003; Zimmerman, Ramirez-Valles, & Maton 1999). This book goes beyond the traditional deficit approach to more thoroughly examine the complexities of the public housing environment for adolescents. The primary goal for writing this book was to support the development and application of a theoretical model to validate the interplay that occurs between the various levels of systems that encompass an environment of complexities nested within public housing neighborhoods.

The first three chapters of the book introduced a hypothesized theoretical framework for understanding the interconnectedness of various risk and protective factors and their impact on adolescent development in public housing environments. The theoretical model and underlying concepts provide a new focus and direction for research on public housing, an

institution that has been woven into the fabric of the urban landscape for at least half a century. There has been a recent trend in policy to make significant changes in public housing based on the hypothesis that living in public housing has deleterious effects on youth and their development (Currie & Yelowitz 2000; Goetz 2011; Goetz & Chapple 2010). Many scholars and policymakers consider public housing developments to be strongholds of high crime and poverty.

Notwithstanding the fact that families are likely to always live in location-based public housing, limited research has been focused on the positive cultural aspects of these communities or has asked whether these neighborhoods could have any advantages. This near-absence of research on positive adaptations within the context of public housing neighborhoods precludes the development of contextually appropriate preventative interventions based on empirical evidence gathered in public housing neighborhoods. Accordingly, empirical investigations should be undertaken to verify if public housing is an entirely negative environment for youth development and to assess the degree to which promotive and protective factors exist within public housing neighborhoods.

The majority of the current research investigating the experience of youth who reside in public housing has used a negative lens. The research highlighted in this book investigates the strengths and resiliency that can develop in tenants living in an environment defined by a high level of poverty and other environmental stressors. A viewpoint that considers public housing as an environment that only supports the development of youth antisocial and/or criminal behavior does not take into account possible pro-social influences and opportunities that may be present in these communities. Public housing is not a monolith with predetermined adolescent outcomes. Although there are numerous potential negative influences in public housing communities, the research in this book purports that these negative influences can be counterbalanced by positive influences.

Chapter 3 discusses an integrated model with a multilayered context that contributes to the various types of influences that affect youth who reside in public housing. The continual interplay between these different layers at various ecological levels (exo, meso, and micro) is articulated in neighborhood institutions and the surrounding communities.

The exo-ecology level sets policy and organizational foundations that impact other ecological levels. The exo-ecological affects are most

commonly expressed in the demographic composition of residents. In turn, policy and organizational systems influence the type and quality of institutions established in proximity to public housing. All of these institutions and systems act in concert to shape the social processes amongst individuals who live within public housing structures and the larger neighborhood. The interplay between the various ecological systems is dynamic; changes in one system directly affect the other systems.

This dynamic systems relationship presents difficult challenges for researchers trying to account for the various factors affecting youth development in that environment. Causality of a specific development outcome will likely be the result of multiple factors emanating from the various systems surrounding youth in public housing. Therefore, there is a need to disaggregate the various factors to more completely identify which support antisocial behaviors and which support resiliency and positive youth development.

The Integrated Model of Adolescent Development in Public Housing Neighborhoods hypothesizes a system of both distal and proximal factors that contribute to the diverse developmental trajectories for youth in public housing. Distal factors (e.g., policy, organizational structures) promote isolation and stigmatization, which in turn foster inorganic communities. These inorganic communities then underpin the social process of trophic cascading. Trophic cascading is when individuals with high community status (adults) are nonexistent, and they are subsequently replaced by individuals with lower community status (youth). A consequence of trophic cascading is the adultification of youth in public housing environments; the authors consider adultification as both positive and negative. Community isolation and deprivation create space for developing antisocial behavior. At the same time, these community stressors can motivate families to increase youth monitoring and use fictive kinship networks to support protective factors to guide positive youth development. The authors hypothesize that adultification can lead to greater participation by youth in family decision-making, which may improve self-efficacy and provide protection against environmental risks. Adultification can also potentially create a psychological toll that manifests as anger, depression, and negative coping behaviors (e.g., substance abuse and involvement with antisocial peers). The relationship between protective and risk factors can influence this balance in either a negative or positive direction, depending on the context for developing youth in public housing neighborhoods.

The research in this book was implemented with the goal of increasing participation from several types of community stakeholders. The primary focus was on youth residents of public housing, followed by a focus on local housing authorities and then on surrounding community centers and social service agencies. The design for this study was innovative. Identification of study participants was conducted using nonprobability sampling methods. To provide a deeper knowledge of these community residents, the design moved beyond the traditional sampling methods to identify often underrepresented youth (e.g., delinquent or uninvolved youth in mainstream activities); the researchers undertook an alternative approach by gaining access to the individual's social circle and then requesting participation directly. The researchers measured aspects of the public housing community, family and home life, peer relationships, and psychosocial factors. Using the local vernacular in the survey was important to the youth's understanding of the purpose underlying the various questions on the survey.

The use of residents in public housing to recruit participants and assist with the administration of the survey and the use of other nontraditional scientific methods were completed with the goal of increasing the participation of a population that has been historically underrepresented in statistical samples and the research literature. All authors are aware of the limitations that their design and methods place on the findings. Despite these limitations, this book represents significant contributions toward our understanding of the developmental trajectory of primarily minority and immigrant youth residing in urban public housing. This book is a first of its kind in public housing research because it includes primary data from youth in public housing from multiple housing developments located in multiple cities.

Youth in urban public housing exhibit an array of attitudes in regards to self-efficacy and delinquent behavior. Their disposition toward self-efficacy and delinquency are directly affected by the dynamic relationship between risk and protective factors that encompass youth in public housing. Throughout the book, researchers have examined how these attitudes both affect youth and are shaped by environmental factors.

It is important to note the gender differences among adolescents in urban public housing. Females are the most likely to exhibit both high self-efficacy and high unfavorable attitudes toward delinquency. The authors refer to these youths (mostly females) as "high efficacy–high attitudes youth."

Additionally, these youth differ from other youth in terms of their lower involvement in delinquent behavior, fewer associations with antisocial peers, and lower numbers of depressive symptoms. Females also reported higher levels of adultification. The high efficacy–high attitude youth behaved more pro-socially, while also undertaking a larger number of adult roles within their lives. Protective and risk factors within the urban public housing environment were also experienced differentially by high efficacy–high attitude youth as compared to others. High efficacy–high attitude youth had stronger fictive kinship networks, more maternal involvement, less domestic conflict, and fewer incidence of victimization. These youth experience greater levels of protective factors as compared to risk factors in their environment.

These findings support components of the Integrated Model of Adolescent Development in Public Housing Neighborhoods. The research confirms that youth with highly efficacious beliefs and unfavorable attitudes toward delinquency have been exposed to a greater number of the strengths found in the public housing environment (e.g., adultification, fictive kinship) while limiting their exposure to the environmental harms (e.g., delinquent peers, substance use, victimization), thereby demonstrating high developmental competences despite the presence of risk. Hence, they act in a more pro-social and healthy manner.

Public housing neighborhoods often expose youth to multiple negative situations (e.g., witnessing and victimization by violence, exposure to delinquent peers, access to drugs, household conflict). Many urban public housing environments are proliferating with risk factors. Youth in these environments are compelled to manage these risks in either an adaptive or maladaptive way. Using the Integrated Model of Adolescent Development in Public Housing Neighborhoods, the authors found that public housing also fosters countervailing protective factors in response to the often violent and antisocial influences surrounding urban public housing sites. Community cohesion is one such important protective factor (Nebbitt 2009; Nebbitt et al. 2012). These findings are consistent with other studies that found community cohesion to be inversely associated with various forms of violence (Sampson, Raudenbush, & Earls 1997). Community protective factors (e.g., cohesion, collective efficacy) moderate the relationship between community violence exposure and subsequent internalizing and externalizing adjustment problems (e.g., emotional regulation skills, acceptance from caregivers, quality of caregiver–child interaction; Kliewer

et al., 2004). How the presence of community cohesion affects a youth's propensity to cope with risk factors through maladaptive behavior (e.g., substance abuse) is the focus of chapter 6. Substance use is directly related to several factors commonly found in urban public housing. Witnessing or directly experiencing different types of violence (e.g., community violence, household violence, and posttraumatic stress disorder symptoms) has a significantly positive effect on the likelihood that adolescents will use drugs and/or alcohol. These findings are consistent with several delinquency and substance use studies (DuRant et al. 2000; Hilarski 2006; Kilpatrick et al. 2003; Lambert et al. 2004; Vaughn et al. 2007).

However, when entering community cohesion into the model with risk factors for substance use, the authors found community cohesion to have a restraining effect on a youth's likelihood to use substances. Also, community cohesion mitigated the influences of exposure to delinquent peers and witnessing community violence on substance-using behaviors. These findings continue to build upon the literature examining community efficacy and cohesion (Sampson, Raudenbush, & Earls 1997). Significant findings from these analyses are that youth with the ability to draw upon a richer social support network showed more resilient and adaptive behaviors in reaction to risk factors in their housing developments. Thus, although the ecology of public housing presents many challenges for youth, there are strengths present that can be cultivated to improve the likelihood of positive developmental outcomes.

As theorized throughout the chapters in the book, the behavior of youth in urban public housing is shaped by the larger environmental context. Various factors in communities (e.g., stigmatization, drug use, violence) possibly are associated with depressive symptoms in youth (Nebbitt & Lombe 2007). Youth exhibiting depressive symptoms may use several coping strategies, such as substance use, sexual risk-taking, or other unhealthy behaviors, in reaction to neighborhood hazards. The authors identified direct effects between neighborhood risk and sexual risk-taking, while indirect effects were found between neighborhood risk and depressive symptoms. These findings were different for males than for females. The relationship between neighborhood risk, depression, and high-risk behaviors by youth is related more to substance use than to sexual risk-taking. Neighborhood risk appears to be manifested in youth sexual risk-taking through different mechanisms than depressive symptoms. Furthermore, the impact of

parental supervision on youth high-risk behaviors may be limited in the public housing environment. Interventions should focus on gender when assisting youth in public housing to deal effectively with depression.

The literature indicates that urban public housing complexes are high-risk environments for healthy youth development (Anthony 2008; Goetz & Chapple 2010; Ireland, Thornberry, & Loeber 2003; Nebbitt & Lombe 2007). Despite these well-documented risks, urban public housing also possesses a unique set of protective factors that can build resiliency in youth (Coll et al. 1996; Nebbitt 2009; Nebbitt & Lombe 2010). Mixed results were found when analyzing the variables posited in the Integrated Model. The protective factor of adultification did show a negative relationship with depression, whereas community cohesion was negatively associated with a youth's level of depression. In terms of the emotional effect of environmental risk factors, support was verified for increased depressive symptoms within youth who reported greater levels of neighborhood risk and more associations with delinquent peers.

Differential results were found across cities. Of the four cities examined, only one city showed a significant interaction of community cohesion by delinquent behavior as well as adultification by both delinquent behavior and neighborhood risk. These findings suggest that community context varies by cities and regions, and that both can have a distinctive function in levels of depression and how protective factors interact with environmental risk factors. Overall, community cohesion can be considered to be a protective factor when there is interaction with a presenting community risk factor. In contrast, adultification exhibited a less consistent relationship in shielding youth against the emotional effects of community risk. Based on the results of the studies highlighted in this book, adultification can be perceived as ambiguous in a youth's life for promoting resiliency toward neighborhood risk while also increasing vulnerability to delinquent peers.

Many urban public housing neighborhoods across the country have seen pandemic levels of violence, crime, and drug use, which has resulted in damaging effects on these communities' sense of cohesion. The lack of community cohesion in urban public housing can be particularly harmful to youth development by lowering the youth's sense of place and level of self-efficacy (Nebbitt 2009). As detailed throughout this book, the lack of self-efficacy is directly related to unhealthy and risk-taking behaviors. Chapter 9 provides an excellent overview of the various programmatic

efforts underway to support positive youth development in urban public housing communities. Programs such as HOPE-IV, Moving to Opportunity, and Choice Community Initiative provide public housing residents with options to move to neighborhoods with more stability or improve existing public housing neighborhoods by developing resources through public–private partnerships.

NEXT STEPS IN KNOWLEDGE, RESEARCH, AND PUBLIC HOUSING POLICY

Conducting research in geographically small homogeneous communities, such as public housing developments, that are nested within larger homogeneous neighborhoods presents several theoretical and methodological challenges. This book represents a first step toward addressing some of the theoretical challenges. However, addressing most of these methodological challenges is beyond the scope of this book. One major contribution of this book is the introduction of a new theoretical perspective for understanding child and adolescent development within the context of public neighborhoods.

Theory

The new theoretical perspective is outlined in a model in chapter 3. This model attempts to explain how child and adolescent development and behaviors are affected by growing up in publicly constructed and publicly managed neighborhoods (i.e., public housing communities). Furthermore, this book introduces two new concepts—inorganic communities and trophic cascading effects—and quantitatively investigates an existing qualitative concept, adultification (Burton 2007; Jarrett 1990, 2003). It is important to note that the model is not meant to be comprehensive or exhaustive. Rather, the Integrated Model of Adolescent Development in Public Housing Neighborhoods is introduced for two basic reasons: 1) to encourage a discussion amongst researchers, practitioners, and policymakers on how context may account for some of the symptoms, attitudes, and behaviors expressed by youth living in urban public housing; and 2) to fill a theoretical gap in knowledge since existing research on child development in public housing does not share a unified framework. Because of

the lack of a shared theoretical framework, empirical knowledge on life in public housing is more of a patchwork than a unified body of knowledge to increase our understanding of life in urban public housing neighborhoods. Accordingly, a definitive statement on how youth develop into productive members of society in our nation's only public neighborhoods cannot be gleaned from the literature. Our model represents a first step toward articulating a unified framework for future research and beginning to rectify the theoretical gap in knowledge for this area of inquiry.

Methodology

There is much work to be done to explain and assess with rigor the factors affecting child and adolescent development in public housing neighborhoods. This book makes an important methodological step in an area of research that has been dominated by small, single-site studies. There are several methodological challenges facing investigators interested in this area. To mitigate this challenge, this book introduced two concepts: inorganic communities and trophic cascading effects. The next step in research is to develop the operational definitions of these concepts. Functionalist perspectives may clarify how various elements of a community may contribute to its overall health and functioning. Functionalism may provide a starting place for operationalizing inorganic communities. Operationalizing the concept of trophic cascading effects may prove to be less challenging because this concept has an empirical definition in the physical sciences. It is important to note that public housing may not operate with similar predictability to, for example, an aquatic environment. There are a number of factors (both internal and external) unique to public housing neighborhoods that require rigorous consideration when applying the concept of trophic cascading effects to the human ecology of public housing.

Measuring Internal and External Effects

There is also a need to disentangle and assess internal and external influences separately. This is critically important in public housing communities because these communities are almost always embedded within high-poverty, high-crime neighborhoods. The location and socioeconomic and demographic characteristics of residents and the physical structure of many

public housing communities make them vulnerable to criminal infestation from the surrounding neighborhoods. Over time, this process, coupled with existing crime elements in public housing communities, can transform the housing developments into epicenters of crime, which, in turn, diffuse crime back into the surrounding neighborhoods. To accurately measure and assess neighborhood effects within public housing, these confounding factors must be disentangled.

Much of the research, including the chapters in this book, on families in location-based public housing assumes that wealth is invariant. From a traditional research standpoint, this is a valid assumption because there are income restrictions (i.e., 80 percent to 50 percent of the median income for the county or metropolitan area) associated with living in public housing. However, for public housing families, the acquisition of assets such as a car, television with cable, and a computer with internet can make a tremendous difference in the life of a child. These assets may give families access to resources that other families may not have. These nontraditional assets, or the absence thereof, are never calculated into statistical models when differences in child outcomes are assessed. Furthermore, limited research attention has been focused on unreported income, legal and illegal, that may flow into some households in public housing developments but not others. There is definitely a need for researchers to revisit how we conceptualize and measure income and assets in public housing communities. Unexplored fiscal and social resources and capital may account for the unexplained variances in our statistical models.

Spatial Analyses

Another important step in public housing research is to incorporate geographic information system (GIS) technology. As a result of the close physical proximity of public housing residents, there is a need to understand how physical space affects youth's social networks and their mental health symptoms, attitudes, and behaviors. Unlike other low-income urban neighborhoods where residents are spread out, public housing neighborhoods are relatively densely populated. These geographical configurations may have far-reaching implications for children's exposure to community violence and their exposure to other nefarious activities (e.g., drug dealing).

Current research on exposure to community violence and other risk factors have relied primarily on frequency (e.g., how often) and intensity (e.g., the magnitude of the event). This approach may be appropriate for youth living in nonpublic housing neighborhoods. Youth living in nonpublic housing urban communities may have the option of circumventing areas of concentrated violence, urban hassle, and drug dealing. However, this option may not be available for youth living in public housing developments. In public housing settings, there is a need to better understand how constant exposure to violence and drug dealing; the proximity of these neighborhood problems to youth residents are associated with their mental health symptoms and other high-risk behaviors. GIS technology may serve as a useful tool to measure and assess how proximity to "hot spots," violence, and other high-risk activities affects adolescents' mental health and health-risk behaviors.

There is still much to accomplish in order to adequately address public housing issues in the policy arena. Policymakers should be cautious in viewing urban public housing as inherently negative; it is important that policymakers recognize the strength and resiliency in these complex environments. Programs and policies that aim to improve public housing and the structural inequities that afflict its residents can provide a sense of self-efficacy to youth that can empower them toward achievement throughout their lives.

APPLICATIONS TO PRACTICE

This book introduces the Integrated Model of Adolescent Development in Public Housing Neighborhoods and tested various components of this model using data collected from African American youth living in urban public housing. Our model builds on an ecological and resilience framework. The model proposes that significant interactions occur between risk and protective factors across various domains (e.g., community, family, individuals) in public housing communities and that these interactions contribute to positive or negative outcomes in youth, as depicted in figure 3.1. To the extent that the data allowed us to test the model, we found varying degrees of support for the Integrated Model in each of our empirical chapters.

The findings from these analyses indicated that various components of the Integrated Model are applicable to the mental health and well-being

of adolescents living in public housing neighborhoods. Focusing primarily on community and individual strengths and capacities, we support that a strengths- and capacities-based approach may be more beneficial to practitioners than focusing on risk factors and failures. First, strength-based and capacity-building interventions are fundamental principles of social work and form the foundation of practice. Second, our model and findings do not suggest that risk factors operate any differently in public housing (e.g., youth exposed to higher risk factors reported worse outcomes). Third, evidence indicates that successful interventions build on strengths and capacity. Finally, much of the literature on African American youth is saturated with research on how and why they fail, with little or no published information on how these youth become healthy productive citizens.

Community Cohesion

Community cohesion is a key concept in the Integrated Model and is also a salient protective and promotive factor, as discussed in chapters 6 and 8. The analyses in these chapters indicate that the perception of strong community cohesion significantly affects the effects of risk factors (e.g., violence, delinquent peers). Building on the model and the evidence in this book, prevention and interventions to reduce substance use (e.g., marijuana, tobacco, alcohol), improve mental health (e.g., depression), and build efficacy should focus on building community cohesion and engaging youth in collective efforts for community engagement.

Self-Efficacy and Conventional Attitudes

Two additional key concepts of the model are self-efficacy and attitudes toward deviance. The integrated model proposes that these concepts will be directly impacted by the interaction between risk and protective factors, and they will in turn promote pro-social behaviors. The results detailed in chapter 5 suggest that youth with highly efficacious beliefs (i.e., confidence in their ability to achieve their goals) and conventional attitudes toward deviance (i.e., lower endorsement of adolescent deviance) are more likely to benefit from protective factors (e.g., more extended kinship network, more encouraging mothers) and are less likely to be exposed to risk factors (e.g., community violence, household conflict). Highly efficacious and

conventional youth also reported higher school involvement, lower substance use and delinquency, and fewer delinquent peers. These youth also reported significantly lower depressive symptoms.

The findings on self-efficacy and conventional attitudes, in addition to the findings on community cohesion, provide preliminary foundational evidence that supports the development of interventions. This work suggests that engaging youth within protective networks of community and family members, in addition to extended kinships, will increase their confidence and shape their beliefs, which in turn will support better outcomes. Intervention strategies collected from this book could be implemented through nonspecialized, community-based interventions. For example, public housing complexes in most cities have two organizational structures that may be important mechanisms through which to implement preventative interventions.

First are tenant-led organizations. During the 1980s and 1990s, many of these organizations became management companies, leveraging control of their housing development from local housing authorities (Koebel & Cavell 1995). Tenant-led organizations also include tenant advisory boards, which ensure resident representation on the housing authority's board of commissioners. Tenant organizations are perfect conduits through which to promote community cohesion, collective efficacy, and civic engagement, and consequently improve adolescents' well-being.

Community practitioners should work with residents to strengthen the capacity of tenant organizations and tenant advisory boards by 1) assisting them in identifying and leveraging political and financial support; 2) helping them to identify challenges that residents face; and 3) cultivating their ability to systematically address these challenges with the goal of encouraging and increasing civic engagement among youth. Community practitioners may play a critical role in all areas of capacity building in public housing developments. Increasing civic engagement with youth, however, may be particularly important to these youths' mental health and health-risk behaviors in addition to the well-being of the community at large. Community practitioners can help form and organize youth tenant organizations and youth advisory boards.

These citywide youth tenant organizations could be a form of representative democracy, modeled after the U.S. Congress. That is, community practitioners can help youth organize at the housing development level; then,

youth could elect their leaders, who would represent their interests and advocate their concerns. These elected youth leaders would subsequently have representation on decision-making boards at each housing development, on citywide boards, and on the board of commissioners. Such an approach would simultaneously teach youth leadership skills and increase their sense of community and ownership of their communities. In their report on Senate Resolution No. 347, Koebel and Cavell (1995:17) maintained:

> Resident organizations tend to improve living conditions for residents in public housing. In general, residents of housing authorities that are represented by resident organizations are more cooperative with the housing authority, leading to a safer, cleaner, and better maintained environment. Residents feel empowered by elected representation, are given a sense of community and proprietorship involving residents with outside organizations leads to better relationships with the broader community, positive role models, monetary support, and educational growth.

Although this report did not focus specifically on youth, it is highly likely that civically engaged youth will feel a greater sense of belonging, which our model predicts (and research shows) will decrease their substance use and reduce their risky behaviors.

The second organizational structure that may prove critical to the implementation of preventions and interventions within public housing is the community center. For many housing developments (e.g., traditional and HOPE IV developments), the community center is owned and operated by the local housing authority (e.g., St. Louis, Washington, DC). However, for other housing developments, the community center is owned and operated by nongovernment organizations and is located within or adjacent to the housing development (e.g., New York City). Community practitioners can play a critical role in invigorating these communities by helping directors leverage financial support and forge partnerships with corporations, law-enforcement agencies, and universities. With additional financial support from corporations, these community centers can form organized sport teams (e.g., football, basketball, boxing). Also, by partnering with local law-enforcement agencies, these community centers would be eligible for support via police athletic leagues, which provide financial support and volunteerism from police offers with expertise in coaching. Furthermore,

student volunteers from universities, particularly via sororities and fraternities, could also prove to be a vital resource to these community centers. Members of sororities and fraternities could form book clubs for youth and host book drives. These students can also play a vital role in fundraising for these community centers by increasing their technological capacities (e.g., computers, software, internet) and reducing their digital divide. These community center–based interventions have the potential to increase collective efficacy and community cohesion, which our model and research indicate are associated with better outcomes for youth living in public housing.

This book details mental health interventions supported by researchers' findings, which may be useful to youth who must navigate the challenges of urban public housing. Preventative services that cultivate protective factors addressing the effects of environmental risks appear to be appropriate for public housing youth. Prevention interventions should promote the empirically identified protective factors (e.g., parental support, increased family involvement, supportive fictive kinship networks, community engagement). In addition, interventions also need to diminish the risks of depression, substance use, delinquent behavior, delinquent peers, household and community violence, and neighborhood disorder. As indicated in the findings, more than one factor usually produces an effect on a specific problem behavior, and factors were found to operate at both proximal and distal levels. Therefore, interventions should be built to address more than a single factor, and multiple levels—such as the individual, family, peer, school, and community levels—should be targeted.

Overall, interventions for youth living in urban public housing need to be developed to incorporate the unique context of their environments. By focusing interventions on both protective and risk factors found in the public housing environment and directing those interventions at different levels of systems in the youth's life, there is potential to improve the developmental trajectory of the youth residents of urban public housing.

CONTRIBUTORS

VON E. NEBBITT, PHD, is an associate professor at the Jane Addams College of Social Work at the University of Illinois at Chicago. He holds his BA in sociology from St. Louis University, and an MSW and PhD from the Brown School of Social Work at Washington University in St. Louis. Dr. Nebbitt has more than 10 years of experience as a researcher, educator, and social work practitioner. Dr. Nebbitt's research training has been funded by the National Institute of Mental Health, the National Institute of Drug Abuse, and the National Institute of Minority Health and Health Disparities. Dr. Nebbitt's research has been funded by both federal and foundation grants. His publications and community practice focus on health-risk behaviors, delinquency and violence, and mental health among African American youth living in urban public housing. His scholarship has been published in several health and social science journals.

CRYSTAL L. BARKSDALE, PHD, is a health disparities researcher and licensed clinical psychologist. Her research interests and current work are primarily focused on understanding disparities in health and mental health, and the role of cultural and linguistic competence in eliminating disparities. She has worked on projects that have explored racial disparities and disproportionality in child-serving systems, such as the juvenile justice and public mental health systems, and that have identified culturally appropriate mental health interventions for at-risk youth and their families. She is currently working on developing innovative programs and policies that emphasize cultural and linguistic competence to reduce health disparities and improve the quality of health care.

CAROL S. COLLARD, PHD, is Assistant Professor of Social Work in the Department of Social Work and Human Services at Kennesaw State University (KSU). She earned a BA in communications from Loyola University of New Orleans and her MSW and PhD from the University of Georgia School of Social Work. Dr. Collard's professional background includes resident services program development for special needs housing, community organizing and leadership

development, child welfare, social work administration, and nonprofit management. Her research interests include addiction recovery, affordable and supportive housing, chronic poverty, and welfare reform. At KSU, she teaches courses in the substance sbuse track of the Master of Social Work program.

ODIS JOHNSON, PHD, is Chair and Associate Professor of the African American Studies Department at the University of Maryland. He conducts research on urban inequality, low-income neighborhoods, and their impact on the learning experiences of African American youth, specifically males. He is a faculty associate at the Maryland Population Research Center and also regularly advises research firms and government agencies in policy analysis and evaluation. Additionally, Dr. Johnson is a recipient of the National Academies Ford Foundation Fellowship, among others. His work has been published in numerous scholarly journals, including the *Review of Educational Research* and the *Journal of Public Management and Social Policy*.

SHARON LAMBERT, PHD, is a clinical community psychologist and Associate Professor of Psychology at the George Washington University. Her research focuses on the development and course of internalizing problems for urban and African American youth, the role of neighborhood and race-related stressors in youth and family functioning, and school-based prevention. Dr. Lambert's research has received support from the National Institutes of Health. Her research has been published in several prominent psychiatric, community psychology, and social science journals.

MICHAEL A. LINDSEY, PHD, MSW, MPH, is an associate professor in the School of Social Work and holds a faculty appointment in the Center for School Mental Health, Department of Psychiatry, School of Medicine at the University of Maryland, Baltimore. Dr. Lindsey holds a PhD in social work and MPH from the University of Pittsburgh, a MSW from Howard University, and a BA in sociology from Morehouse College. Dr. Lindsey is a child and adolescent mental health services researcher and has received research support from the National Institute of Mental Health to examine the social network influences on perceptual and actual barriers to mental health care among African American adolescent males with depression. His peer-reviewed research has appeared in adolescent, psychiatry, psychology, and social work journals.

MARGARET LOMBE, PHD, is an associate professor at the Boston College Graduate School of Social Work. She is also a faculty associate at the Center for Social Development at Washington University in St. Louis. Her area of expertise is international social development, with an emphasis on social inclusion/exclusion

and capacity building. Dr. Lombe has provided consultation to the United Nations and has participated in a number of Experts Group Meetings on inclusion/exclusion. She has also published extensively in peer-reviewed journals, as well as book chapters. Her recent work has appeared in refereed journals, such as the *Journal of Human Behavior in the Social Environment*, *Social Work Research, Addictive Behaviors, Children and Youth Services Review,* and the *Journal of Sociology and Social Welfare.*

CHERYL LOVELL is Executive Director of the St. Louis Housing Authority. Ms. Lovell has been involved in public housing for approximately 20 years. She has served in her current position for approximately 15 years. She previously served as the executive director of the East St. Louis Housing Authority. Prior to her career in public housing, Ms. Lovell practiced construction law and worked as a construction engineer. Ms. Lovell has a BEng in civil engineering from Vanderbilt University and a JD from St. Louis University.

DAVID B. MILLER, PHD, is an associate professor of social work at the Mandel School of Applied Social Sciences at Case Western Reserve University. Dr. Miller has conducted and published research into the effects of chronic stressors on adolescents and young adults living in urban environments. Dr. Miller developed the Urban Hassles Index, which is being used by researchers in various settings around the United States in the study of the effects and influence of chronic stress on a variety of population groups, including children born to drug-addicted mothers. His current research focuses on the influences of health behaviors and practices on African American health disparities. Additionally, Dr. Miller is a city council president in South Euclid, Ohio.

LISA R. RAWLINGS, PHD, MSW, MPA, currently serves as a special assistant to the director of the Court Services and Offender Supervision Agency for the District of Columbia (CSOSA). CSOSA is a federal agency that provides community supervision for the men and women of the District of Columbia on probation, parole, or supervised release. Dr. Rawlings has worked and/or conducted research in the area of displacement with immigrants and refugees, disaster survivors, children and youth in child welfare settings, and men and women in criminal justice settings. Dr. Rawlings serves as an adjunct professor at CUNY Baruch's School of Public Affairs.

AJITA M. ROBINSON, MA(R), is a doctoral student in the Graduate School of Education and Human Development Counseling Department at George Washington University. She holds a Masters of Arts Research from St. Louis University. Ms. Robinson's research primarily focuses on the chronic stressors,

trauma, and the process of well-being among African American urban youth. Prior to her doctoral studies, Ms. Robinson worked as a clinical mental health therapist with children and families affected by parental incarceration, divorce, and violence. She also conducted research focusing on the reintegration process of nonviolent female offenders, and the reunification process between these women and their children.

THEDA ROSE, PHD, MSW is a research assistant professor at the University of Maryland School of Social Work in Baltimore. Dr. Rose has more than 15 years of practice experience with adolescents in child welfare, community, and educational program settings. Her primary research interests include mental health promotion and mental disorder prevention among minority adolescents, and the effectiveness of mental health interventions for children and adolescents in school and community settings. Dr. Rose holds a PhD from Catholic University, an MSW from Stony Brook University, and a BA in psychology from Johns Hopkins University.

KATHY SANDERS-PHILIPS, PHD, is a professor in the Department of Pediatrics and Child Health at the Howard University and the George Washington School of Medicine. At Howard, she is a Distinguished Research Scientist, Director of the Research Program in Epidemiology and Prevention of Drug Abuse, and Executive Director of the DC–Baltimore Research Center on Child Health Disparities. Trained as a developmental psychologist at Johns Hopkins University, Dr. Sanders-Phillips's research has focused primarily on relationships between exposure to violence, risky behaviors, and health outcomes in communities of color. Over the course of her career, she has developed a reputation for crosscutting and intersecting research that addresses health in communities of color.

TAQI TIRMAZI, PHD, MSW is an assistant professor at the Morgan State University School of Social Work. Dr. Tirmazi's research focuses on the psychological functioning and behavioral health of urban and immigrant youth using a risk and resiliency perspective. Community-based participatory research is his primary research method, which he uses to explore the impact of acculturation on the psychological functioning and behavioral health of immigrant Muslim youth in the United States. His research also examines health disparities in urban African American youth and emerging adults. Dr. Tirmazi earned his MSW and PhD from Howard University. Dr. Tirmazi also completed the two-year W. K. Kellogg Health Scholar postdoctoral program. His work experience includes early childhood education, social work practice, positive adolescent development, sports, and recreation.

STEPHEN TRIPODI, PHD, is an assistant professor in the Florida State University College of Social Work. His primary research interests include corrections, victimization and incarceration, juvenile justice, adolescent substance abuse, and school social work. Recently, Dr. Tripodi has been working with the Advanced Center for Behavioral Health Services and Criminal Justice Research to study the influence of childhood victimization on subsequent mental health/substance use problems, and ultimately recidivism for women prisoners in Raleigh, North Carolina. He was a recipient of the 2009–10 Professor of the Year for the Florida State University College of Social Work.

MICHAEL G. VAUGHN, PHD, is an associate professor in the School of Social Work at St. Louis University. Dr. Vaughn also holds appointments in Public Policy and the Department of Epidemiology in the School of Public Health. He has contributed more than 190 professional publications across a wide range of areas. Dr. Vaughn's research interests include adolescent drug use and abuse in relation to antisocial behavior over the life course. Current projects include a cell-to-society approach to the study of human behavior, youth violence prevention, school dropout, and drug use epidemiology.

CHRISTOPHER A. VEEH, MSW, is a doctoral student in the Graduate School of Social Work at the University of Denver. He holds his MSW from the University of Kansas. Mr. Veeh's research primarily focuses on the community reintegration and desistance processes of juvenile and adult incarcerated populations. Prior to his doctoral studies, Mr. Veeh assisted in the evaluation of the Kansas Department of Correction's Reentry Initiative at the KU School of Social Welfare.

JAMES HERBERT WILLIAMS, PHD, MSW, MPA is Dean and Milton Morris Endowed Chair at the Graduate School of Social Work at the University of Denver. He holds his MSW from Smith College, MPA from the University of Colorado, and PhD in Social Welfare from the University of Washington–Seattle. Dr. Williams has more than 30 years of experience as a scholar/educator and social work practitioner. His research and training has been funded by grants from several federal and state agencies and private foundations. Dr. Williams' publications and community engagement focus on health promotion and disease prevention, health disparities, economic sustainability, human security, conflict resolution, delinquency and violence, mental health services for African American children in urban schools, disproportionate minority confinement of African American youth in the criminal justice system, community strategies for positive youth development, and social issues of the African

American community. His scholarship has been published in several prominent health and social science journals.

TAREK ZIDAN, MSW, is a doctoral student at the Howard University Graduate School of Social Work and is an affiliated faculty member of the Social Work Department at Metropolitan State University of Denver. Mr. Zidan holds his MSW from the Washington University in St. Louis, Missouri. Prior to his doctoral studies, Mr. Zidan worked in the child welfare system and with people who have severe mental illness and developmental disabilities in Colorado.

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